

Please quote our ref: 58 PN-C

7 March 2002

Kapiti Coast District Council
Private Bag 601
Paraparaumu

Attention: Robyne Cranshaw

Dear Ms Cranshaw

S 172 Resource Management Act 1991 - Notice of Requirement for Designation;
State Highway 1 Improvement Project - MacKay's Crossing Paekakariki;
Decision of Transit New Zealand as Requiring Authority.

I refer to your letter and attached report dated 14 February 2002 in which you inform Transit New Zealand that Commissioners acting jointly for Kapiti Coast District Council and Wellington Regional Council: -

1. Recommend approval of the Notice of Requirement;
2. Grant consent for associated resource consents.

It is confirmed that Transit New Zealand as requiring authority accepts the recommendation on the notice of requirement and accompanying conditions in full. For your Council's information Transit New Zealand does not intend to lodge any appeals to the Environment Court in respect of the regional resource consents granted.

If you wish to discuss this matter further at this time please contact either Catherine Worsley or Lindsay Daysh of this office.

Yours faithfully



Brian Hasell
Regional Manager

7/3/02

cc Barry Wright/Howard Cheadle – MWH NZ Ltd.
Wellington Regional Council – Attention Sarah Wilks

Wellington Regional Office

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**TRANSIT NEW ZEALAND
MACKAYS CROSSING OVERBRIDGE**

**APPLICATION FOR NOTICE OF REQUIREMENT FOR A DESIGNATION
FROM KAPITI COAST DISTRICT COUNCIL AND FOR RESOURCE
CONSENTS FROM WELLINGTON REGIONAL COUNCIL IN RELATION
TO THE MACKAYS CROSSING OVERBRIDGE PROJECT**

RM 010111

REPORT OF THE HEARING COMMISSIONERS

Commissioner H Tobin (Chairperson)

Commissioner D Hutchison

Commissioner M Pomare

Date of Hearing:

27 November 2001

28 November 2001

29 November 2001

Venue:

Offices of Kapiti Coast District Council, Rimu Road, Paraparaumu.

Date of decision:

13 February 2002

Delegations to Hearings Commissioners.

In accordance with delegations by both Councils, pursuant to section 34 of the Resource Management Act 1991, the Hearings Commissioners had power to make a recommendation to the requiring authority on behalf of Kapiti Coast District Council in respect of the Notice of Requirement, and to determine the applications for resource consent on behalf of the Wellington Regional Council.

RECOMMENDATION AND DECISION

The Commissioners have given consideration to the requests for the NOR made to the KCDC, and for six resource consents from the WRC, set out in this report, and considered fully above.

We consider that the project meets the criteria for a NOR set out in section 171 of the Act. We consider that the applicant has established the necessity for the NOR to undertake the work proposed, has adequately examined alternative proposals and has recognised plans and policies relevant to the work.

We have considered that the applications for consent to carry out the works required to achieve Stage 1 of the project in terms of section 104 of the Act, in particular with relation to regional plan objectives and policies which establish a framework to consider the effects on the environment, and the measures proposed to mitigate these where they will be adverse.

Obviously in a project of this nature there will be impacts on the environment. In this case, the new cutting traverses a recognised geological feature, a sea cliff, and in the construction of a new and improved entrance to QE Park, a historic barn/stable will be moved and old trees removed. It is not possible to totally avoid such effects and we do not think it would appropriate to try to. We consider the measure proposed to mitigate adverse effects which will arise from the works to be satisfactory.

With regard to the non-complying aspects of the water permit (21706) and the land use consent (21042) related to the 'permanent' stormwater pond we accept with the evidence that the pond which will be modified toward the end of Stage 1 works to incorporate a hydrocarbon interceptor, will be in character with the surrounding wetland. It is 'wetland friendly' and sustainable in terms of Part II of the Act.

We have discussed matters that arise under Part II of the Act and find the project is in accord with the overriding purpose of the Act, the sustainable management of resources.

Accordingly we:

recommend to Transit New Zealand that the requirement of a designation, as set out in the report, and as described in the application documents, be confirmed subject to the conditions included in attached Schedule 1, and

resolve to grant consent to the applications by Transit New Zealand, as set out in this report, and as described in the application documents, subject to the conditions included in attached Schedules 2 to 8.

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NOTICE OF REQUIREMENT

Kapiti Coast District Council (KCDC) received the following application for a Notice of Requirement (NOR) for a designation under section 168 of the Resource Management Act 1991 (the Act), on 2 May 2001:

Notice is given of a requirement for a designation for a period of fifteen years for:

A project or work to construct, operate maintain and repair road forming part of State Highway One and the carrying out of ancillary works and activities (the notation for which is "State Highway Purposes").

(Note: Part of the designation was already covered by existing designation GO 104 in the Kapiti Coast Plan, and part by a proposed Notice of Requirement for the Transmission Gully Motorway Route that is currently subject to appeal. These are parts of the existing designation that may be uplifted, should the proposed Notice of Requirement be approved. This will be undertaken later.)

LOCATION

MacKays Crossing and Queen Elizabeth Park (QE Park), State Highway One. The area subject to the requirement extends approximately 1100m north.

LEGAL DESCRIPTION

Part Lot 5 DP 4269 (John Perkins)

Pt Lot 4 DP 4269 (Sang Sue Ltd, Allan Head)

Lot 1 DP 52615 (Wildlife Reserve, Department of Conservation)

Sec 101 Blk II Paekakariki SD (Wildlife Reserve, Department of Conservation)

Sec Blk II, Paekakariki SD (Allan Head)

Lot 2 DP 10816 (Local Purpose Reserve, Kapiti Coast District Council)

Sec 1 SO 36580 (Landcorp Ltd)

Pt Sec 3 Blk II Paekakariki SD (Queen Elizabeth Park)

SHORT DESCRIPTION OF THE WORK

The NOR (1.6) notes sets out a summary of the proposals, as follows:

- An overbridge to the east of MacKays Crossing
- An improved connection to and from QE Park
- An improved connection to Whareroa farm
- A new railway crossing
- Improvements to a sharp bend on SH1 south of MacKays Crossing
- A link road connecting SH1 south of MacKays Crossing to the Transmission Gully Motorway (TMG) route, following a route contained by the existing State highway and railway line.

and includes a description (2.5) as follows:

- A new designation covering a small area of land on the edge of Queen Elizabeth Park, to the north of MacKays Crossing
- The inclusion of adjacent land in QE Park covered by an existing designation
- A new designation of land to the east and south of MacKays Crossing linking two sections of State Highway One, land currently used for agricultural activities
- A new designation of land to the south of MacKays Crossing between the railway line and State Highway One for the link to TMG. Part of this land is gazetted as a Department of Conservation Wetland Reserve, the remainder is used for rural and agricultural activities
- The inclusion of land covered by the proposed requirement for the TMG Route, again used for rural and agricultural activities
- A new designation of a small area of land within Sang Sue's title on the sharp bend at the end of the straight section of State Highway One to the south of MacKays Crossing.

STAGES OF THE WORK

The description of the NOR proposals noted that these are split into two stages. **Stage One** involves the construction of the overbridge and improvements to the local network. It is intended that these be implemented within a two year construction period. **Stage Two** provides the link to TMG, and it is noted that the implementation of this is dependent on decisions yet to be made on the TMG Motorway.

OBJECTIVES OF THE WORK

The Objectives of the work are set out by Transit (NOR, 2.12) as follows;

- To provide a safer section of highway known to have problems with accidents
- To provide for a more efficient road network by reducing the conflict between vehicles and trains that adversely affects the efficiency of this section of the highway network and that leads to delays, congestion and a reduction in road speed.
- To provide for a safer and less congested access for recreational visitors, staff and tenants of QE Park
- To provide for a safe and efficient connection between SH 1 and TMG Motorway when built.

AMENDMENT TO THE NOR

At the beginning of the hearing, Transit applied for an amendment to the NOR with regard to the entrance to QE Park. It is now proposed to retain the rail level crossing and park entrance in their existing location, and entrance to the riding stables in the park to be from the proposed slip road. This is illustrated on Plan 2400987, S4 – D.

Counsel for Transit submitted that tests had been established as to what amendments could be made to an application, and that section 171 did not require a NOR to be ‘set in stone’ so that it could not be added to. The Commissioners concur with the Applicant that the changes were within the scope of the original documents and it does not seem plausible that any person who did not lodge a submission would have done so if the amended road alignment had been shown on the application documents.

The change had been initiated at the request of the WRC, the management authority for QE Park, which is the party most affected by the position of the entrance. Transit further notified the Commissioners of advice received from Tranzrail to the effect that it had no concerns with the proposed change, subject to conditions, including maintenance of the crossing and alarm system.

The Commissioners accepted the proposed amendment to the NOR on the grounds that it makes no substantive change to the works and no party other than those directly involved (WRC and Tranzrail) has been disadvantaged.

APPLICATIONS FOR RESOURCE CONSENT

The resource consents applied for relate only to the proposed Stage One works. It is noted that there may be need for additional resource consents consequent on agreements yet to be reached with landowners affected by the proposals.

Based on the WRC Officer’s report to the hearing a general summary of the Stage One works for which consent is now required, includes:

- Construction of a new road, incorporating land within QE Park, up to the level crossing. This road will initially act as a replacement for a section of the existing SH1 needed during construction and will be retained in part as the exit slip road going north from the QE Park to join SH1. The existing mature trees along the edge of the carriageway will be felled, the stables moved further into the park and the drainage remodelled in this area. A new railway crossing is to be constructed north of the existing crossing. Construction activities will include earthworks to form an access road that will be the new boundary to the QE Park; provide a new access for the stables with the park from a new internal road, and extensions to existing stormwater culverts.
- Construction of a new road over the railway, including substantial earthworks to both form the ramp up and to make the cutting and retaining walls. New culverts are proposed within the stream where the road passes over, and new culverts and extensions to existing culverts are proposed to take stormwater into and out of temporary sediment ponds.
- Construction of entry and exit slip lanes for southbound traffic between SH1 and a new roundabout. Construction activities include earthworks to form the road, and stormwater drains.
- Construction of a slip lane for northbound traffic on SH1 to exit to QE Park and a new underpass to the remodelled entrance at QE Park.
- Reform the existing access to MacKays Crossing cemetery and construction of a new level crossing further north of the existing one.

- Construct a sediment pond and petro-chemical intercept in the DOC Wetland reserve.
- Construct an embankment and new section of SH1 south of MacKays Crossing requiring earthworks, new sections of culverts and extensions to existing culverts to take the stormwater discharge.
- Construction of an enhanced wetland area in QE Park (outside of the area of designation, but an associated effect of the works).

Applications were made by Transit to the WRC for six resource consents. These are set out in the letter of 19 July provided with the further information submitted by the applicant and notified on 8 August 2001, as follows:

Water Permit Application: WGN010162 [21706] to take, use, dam, and divert water, including surface water for construction, operation, maintenance and repair activities including:

- temporarily damming water and diverting water during road works, in stream works and other construction activities in the Whareroa Stream
- permanently damming and diverting water in the Mackays Wetland by the construction of a sediment pond as part of the sediment control measures to be undertaken during construction, and to be retained as a permanent sediment control feature
- the permanent diversion of sections of the Whareroa Stream through culverts under the new road (resulting in the permanent filling of existing stream bed)
- taking of water from temporary sediment ponds for use during construction activities, primarily for dust suppression and washing vehicles.

Discharge Permit Application: WGN010162 [21707] to discharge contaminants (including sediment and other local material) and water (which may contain contaminants) to water in the Whareroa Stream, for activities involved in the construction, operation and maintenance and repair, including:

- discharges occurring during earthworks, road works, instream works and other construction activities
- discharges of stormwater and other run off or drainage water
- discharges into and out of temporary constructed sediment ponds
- discharges from new culverts.

Discharge Permit Application: WGN010162 [21043] to discharge contaminants (including sediment and other local material) and water (which may contain contaminants) to water in MacKays Wetland Reserve, for activities involved in the construction, operation and maintenance and repair, including:

- discharges occurring during earthworks, road works, and other construction activities
- discharges of stormwater and other runoff or drainage water

- discharges into and out of temporary construction sediment ponds
- discharges into and out of a permanent sediment pond
- discharges from new culverts, existing culverts and extended culverts.

Discharge Permit Application: WGN010162 [21708] to discharge contaminants (including sediment and other local material) to land, including where the contaminants may enter water, for activities involved in the construction, operation and maintenance and repair, including:

- discharges occurring during earthworks, roadworks, instream works and other construction activities.
- discharges of stormwater and other run off or drainage water.
- discharges into and out of temporary construction sediment ponds.
- discharges into and out of permanent sediment ponds and other drainage treatment facilities.
- discharges from new culverts, extended culverts and existing culverts.

Land use Consent Application: WGN010162 [21042] to undertake activities in, on, under or over the bed of Whareroa Stream, and the adjoining MacKays Crossing Wetland Reserve, and related areas, for construction, operation, maintenance and repair activities including:

- works associated with the placing of new culverts, altering and extending existing culverts including changing the size of the culverts, in the Whareroa stream, and the DOC Wetland Reserve.
- excavation of an area of the existing wetland to construct a permanent structure to be used as a sediment control pond and petro-chemical intercept, and associated drainage works
- construction of temporary structures to aid sediment control during construction including the provision of sediment control ponds
- construction of permanent structures in and over the Whareroa Stream bed, including a new farm access road, and to infill parts of the stream bed to form batters to support new roads
- works associated with the forming of the embankment and construction of the railway overbridge, including the construction of retaining walls both temporary and permanent, culverts, and including the depositing of material on the land.

Land use Consent Application: WGN010162 [21044] to undertake earthworks to disturb and remove soil, including excavation of a cutting, building batters and placing roading structures on top of the batters and all associated roading activities as indicated on the submitted drawings.

NOTIFICATION

KCDC requested further information from the applicant on 18 May 2001. Information

was received in response on 24 July 2001. The NOR and resource consent applications were notified on 8 August 2001, with the period for submissions closing on 6 September 2001. It was determined that a joint hearing would be held for the NOR and resource consent applications. KCDC would be the leading territorial authority

SUBMISSIONS

During the period for lodging submissions, 17 submissions were received from or on behalf of the following persons and organisations:

M Robinson, Stables on the Park
Coastal Highway Group
Sang Sue Limited
Kapiti Coast District Council
Telecom New Zealand (withdrawn)
John Hayes Perkins
J Chris Horne
The Department of Conservation
Anthony Edwards
Allan Head
Wellington Regional Council
Historic Places Trust
New Zealand Police
Natural Gas Corporation
New Zealand Fire Service
Wellington Tramway Museum Incorporated
Electralines (received late)

A submission from Chris Glover, 56 Matai Road, Raumati was also received after the closing date for submissions.

THE HEARING

The Commissioners inspected the site of proposed works on 23 November. The hearing for both Requirement and Resource Consents commenced in the KCDC Chambers on Tuesday 27 November, and was adjourned in late morning on Thursday 29 November. Several items of information, viz. the Applicant's final comments on the KCDC proposed condition and a corrected copy of the table of WRC consents, both referenced during the applicant's final submission, copy of correspondence with Tranzrail concerning the amended entrance proposal for QE Park and the current Management Plan for QE Park were subsequently provided to the Commissioners. The Commissioners met on 14 December and determined that the information and submissions which had been presented to them was sufficient for their recommendation on the NOR and determination of the resource consent applications. Parties were advised to this effect on 20 December 2001.

Attendances

A record of appearances is attached, Appendix I.

Planning Officer Reports

Kapiti Coast District Council

The report on behalf of KCDC, territorial authority for the NOR was presented by Tineke Kolff, Resource Consents Planner. Ms Kolff described the application, submissions received to it and issues raised by these submissions. She noted the background reports provided with the application and discussed what were, in her opinion, the effects on the environment which were likely as a result of the works. These covered impacts on archaeological sites, cultural and heritage values, landscape, geology, hydrology, ecology, air quality, amenity and effects arising from construction.

Ms Kolff considered the NOR in terms of the criteria set out in section 171 of the Act, covering the necessity for the designation, objectives of the work and consideration given to alternatives. In accordance with s 171 she noted relevant policies and plans provisions, including those from the Wellington Regional Policy Statement (WRPS), the Wellington Regional Freshwater Plan (WRFP), the Discharges to Land Plan, the Soil Plan and the Air Quality Management Plan. She referred to the Wellington Regional Land Transportation Strategy (WRLTS), the various relevant sections of the KCDC operative District Plan and finally to the sections of Part II of the Act which must be considered.

In her conclusion, Ms Kolff said that:

"State Highway One is the western transport corridor, providing access for the residents of Kapiti Coast to Wellington and as a link between the main urban areas of the region. The traffic volume is currently 22,840 cars per day along this part of the highway and over the gate controlled level railway crossing at MacKays Crossing. This volume is rising at 2.5 percent per year.

"A high number of accidents and congestion occurs at this crossing. It has been recognised that there is a need to address problems of highway safety and efficiency within the vicinity of MacKays Crossing. In particular, the project is listed within the Regional Land Transport Strategy to be implemented before 2004.

"The chosen option is the preferred option, according to the Scheme Assessment Report and evaluation undertaken in regard to:

- landscape and visual effects
- ecological effects
- the opinion of the community and interested parties

"The chosen route will have the least impacts on the ecological integrity of the area by avoiding the wetlands in Queen Elizabeth Park and will only impact on a small area of the Park aligning State Highway One. Loss of wetland in the Department of Conservation Wildlife Reserve resulting from stage two works will be mitigated by a replacement wetland in Queen Elizabeth Park.

The route will more closely follow the natural topography of the area and sediment control into the receiving environment will be easier due to the raised topography of the chosen alignment. On this basis I consider that any of the other options will have a greater effect on the environment."

She said that while the applicant had proposed mitigation measures, these would need to be integrated into the overall design process and may require ongoing maintenance and review. Notwithstanding her conclusion that the chosen route would have least effect on the environment, there would be impacts in a number of areas. She mentioned the sea cliff, the barn/horse stables and the Department of Conservation (DOC) Wild Life Reserve as areas where adverse effects would need to be addressed.

Ms Kolff finally noted that :

"State Highway One is a route of national importance. Improvements to the safety and efficiency of the highway will provide for the social, economic and cultural well being of the community and the people's health and safety.

"The proposed designation and project is consistent with the purpose and principles of Part II of the Resource Management Act 1991. There is a necessity for the project which will provide long- term benefits to the community and region both in terms of traffic safety and efficiency."

She concluded that the requirement should be confirmed, subject to the issues she had raised being adequately addressed. She appended a list of issues which she considered should be addressed by way of conditions to be attached to the NOR.

Wellington Regional Council

The report on behalf of the WRC, authority for the resource consent applications for Stage I of the NOR, was presented by Sarah Wilks, Resource Advisor. Ms Wilks described the background to the projects and reasons for the proposed upgrades. She commented on the form and wording of the applications. She said that the applications were very broad and that careful consideration should be given to the activities which would be authorised. She discussed the various activities which are included in the applications, and in particular the effects of these on the ecological features of the area.

Ms Wilks noted that the MacKays Crossing Wetland Reserve was a key wetland area in the Foxton Ecological District, in a key location for movement of migratory birds between wetlands to the north (Lakes Horowhenua and Papaitonga) and to the south (Taupo Swamp and Pauatahanui). She mentioned the spotless crake as a regionally threatened bird which had been seen in the MacKays area.

She noted that wetlands are recognised in the WRPS as vital ecosystems. Policy 14 is to 'protect the healthy functioning of wetlands'. The MacKays Crossing Wetland is listed (as Mackays Crossing Swamp) in appendix to Policy 4.2.10 of the Freshwater Plan and considered to have a high degree of natural character. She cited several policies of the WRFP which were relevant in this context.

Ms Wilks discussed the Whareroa Stream. She said that while this has been significantly modified by forest clearance, wetland drainage, farming development and the existing culvert under SH1, nevertheless it retained good ecological value and provided a moderately good fish and invertebrate environment.

Ms Wilks addressed the effects of the works under several headings. She said that, given the volume and scale of proposed earthworks, there was potential for significant sediment generation which could adversely affect water quality. Concern about effects of sediment discharge had been raised by submitters. Ms Wilks had analysed the applicant's calculations of sediment yield and discharge. She believed the applicant, using accepted methodology of the Universal Soil Loss Equation, or USLE, had somewhat underestimated the potential sediment yield from the proposal, and also had produced grossly unrealistic results in its calculation of existing sediment discharge levels, through use of the USLE which was not applicable in this case.

Ms Wilks had recalculated the potential for extra sediment discharges to the Whareroa Stream to be significantly greater than had been estimated, and considered that the extra sediment load to be discharged to the wetland would be very large whatever methodology was used. Nevertheless, noting that the applicant would employ standards from the ARC publication TP 90, which has recently been adopted by the WRC, Ms Wilks said that she was satisfied that discharges could be controlled and adverse effects mitigated through consent conditions. She said that an Erosion and Sediment Control Plan (ESCP) was critical to the managing of effects.

Later Ms Wilks discussed the need for an Environment Site Management Plan (ESMP) and listed the contents of such a plan which had been proposed by the applicant. She also noted the proposed contents of the ESCP, and said that in terms of the way the proposed development was structured and the way environmental effects must be managed, both recommended were crucial.

Ms Wilks considered the effects of stormwater discharge, of stream works (including the need for provision for fish passage in the Whareroa Stream), of taking and use etc of water and of soil disturbance. She concluded that the earth and stream works would have potential to adversely affect the natural resources of the environment, and as noted, she was concerned about the accuracy of the estimates of sediment yield that had been provided. However her conclusion was that:

"Notwithstanding the above, I consider that the majority of effects can be avoided, or mitigated through the resource consent conditions recommended in the following schedules. Such conditions require sediment plans, maximise the temporary stabilisation of earthworked areas; make appropriate provision for fish passage; and establish monitoring and reporting protocols to ensure any problems and discharges are identified and remedied. It must be stressed that the success of the earthworks phase lies with the implementation of the erosion and sediment controls and attention to detail is required throughout the construction."

Ms Wilks however looked critically at the proposal to construct a sediment pond and petrochemical intercept as a permanent feature in the wetland area. This was proposed in the southern part of the DOC wetland, an area which had been recently retired from farming and which would be severed by Stage 2 of the works.

Notwithstanding that the area could be considered as of lower quality reserve, Ms Wilks said that the effects would be significant and she believed little consideration had been given to other methods of sediment control.

Ms Wilks also submitted in this context that the 'bed' of the wetland must be seen as caught by the term 'beds of lakes and rivers' and hence a disturbance of it fell within

section 13 of the Act. The activity (under Rule 50 of the WRFP) became ‘non complying’.

Ms Wilks noted the convention of ‘bundling’, whereby an application must be assessed as a whole in terms of its status. She said that the proposed damming and diversion works, should be assessed as ‘non complying’. She considered the tests of section 105(2A) of the Act and submitted that the proposed reclamation and diversion activities in the wetland area required for the stormwater pond were inconsistent with policies and objectives of the WRFP. She recommended that the parts of applications for Land Use Consent (21042) and a Water Permit (21706) relating to the stormwater pond be declined. (Ms Wilks later reversed this submission, see page 28.)

Ms Wilks recommended that a further part of the Land Use Consent (21042), re embankment works be declined as she believed the area involved would be outside of the ‘bed’ of the Whareroa Stream, and a consent therefore unnecessary, as follows:

“Works associated with the forming of the embankment and construction of the railway over bridge, including the construction of retaining walls both temporary and permanent, culverts and including the depositing of material on the land.”

Ms Wilks also raised several issues with regard to the applications and their description of activities. She said that in some cases activities covered in the application would be allowed under the rules of a Plan as a permitted activity. Hence she said, a consent was not required. This applied to the discharge of stormwater, in particular in the longer term from the operational use of a road, which she said was permitted by the WRFP. This would apply to the proposed permanent stormwater pond (discussed above) if it were to be allowed.

The applications for a Water Permit (21706) and Discharge Permit (21707) both related to the permanent diversion of the Whareroa Stream through a new culvert. Ms Wilks was of the opinion that it was not necessary to consent to the ‘discharge from (the) new culvert,’ as this activity was covered by the consent to divert water through the culvert. She therefore recommended that the part of application 21707 for “Discharges from new culverts” be declined.

A somewhat anomalous situation arose however in discussion of the other two applications for Discharge Permits, that is with regard to discharges to water in the Mackays Crossing Wetland area and more generally to land. These included discharges from ‘new culverts, extended culverts and existing culverts,’ but with no specific consent to divert in these cases, Ms Wilks did not recommend declining the comparable parts of the applications.

Ms Wilks recommended that the consents be granted for the maximum period permitted by the Act, except in the case of discharge permits, which she submitted related to construction activities only. She said that a 7 year period is appropriate for the discharge activities associated with the works construction.

Ms Wilks recommended the resource consents be granted except for the parts noted, and subject to the conditions attached in the schedules to the report.

Applicant's Case

Legal Submissions

Legal submissions were presented for the applicant by Ms Clare Sinnott, Chapman Tripp Sheffield Young. Ms Sinnott covered the background and objectives of the project. She noted it was to be done in two stages, and requested that the application be amended to provide for the changed entrance to QEII Park, noted above. Ms Sinnott listed main references for the NOR and applications, noted Transit's requiring authority powers, and reiterated that the designation was sought for the entire project. She listed the resource consents sought.

Ms Sinnott discussed the preliminary assessment of the project, anticipating evidence that would be presented for Transit, and discussed the Officers' reports. Matters arising from the KCDC report were to be addressed by Mr Cheadle in his evidence but Ms Sinnott commented on a number of matters raised by the WRC officer's report. She said that the application for a land use consent for parts of the embankments and structures associated with the overbridge, which the WRC had recommended be deleted on grounds that it was not needed, was required as a land use consent under section 13 of the Act in that parts of the structure would be over the space of land currently covered by the stream or wetland.

Ms Sinnott referred to the submissions that the proposed stormwater pond would not be consistent with WRFP policies and should be declined. She submitted that the test was that such activities should 'not be contrary' to those objectives and policies. She anticipated that Mr Cheadle's evidence would address this matter and that overall the pond was not contrary to the WRFP policies.

Ms Sinnott on behalf of Transit said it still sought consent for discharges of stormwater, even once the project was operational. This was because such activity was seen as part of the 'bundle' of activities making up the discharges to water and to land, and if any part of the bundle required resource consent, then the whole bundle required consent.

Ms Sinnott referred to the proposed conditions put forward by the WRC, noting that Transit sought several amendments to these. Consideration of the proposed conditions was continued during the course of the hearing.

In conclusion, Ms Sinnott said that:

"The project would promote sustainable management. It would rectify delays and safety deficiencies in the State highway network and improve access to Queen Elizabeth Park, and would, therefore, enable people and communities to provide for their social and economic wellbeing and health and safety while avoiding, remedying, or mitigating any adverse effects on the environment."

Ms Sinnott said that Transit requested the Commissioners recommend the NOR be confirmed, with the modified entrance to QE Park, and grant the resource consents sought, subject to the proposed conditions.

Ms Sinnott called a number of witnesses.

Evidence of Catherine Worsley

Ms Worsley is the Regional Projects Manager of the Wellington Transit office. She is a registered engineer and Member of the Institute of Professional Engineers of New Zealand. She spoke on Transit's highway policy, noting the main problems to be addressed at MacKays Crossing. Her evidence then covered Transit's statutory role, strategic background to the project, consultation and land ownership and acquisition issues.

Ms Worsley's conclusion was:

"The safety and delay issues affecting this section of State Highway 1 mean that there is a pressing need to commence construction of the proposed improvements at the earliest possible date. The high accident rate along this stretch of State highway can be substantially reduced by means of the proposed work. The proposed work will also eliminate the delays that are currently experienced due to the level crossing and the geometric deficiencies at the corner 1.5 km south of the level crossing. The work proposed is an appropriate response to road users' needs, while recognising the environmental and community issues which surround the road. The work meets Transit's objectives for the project."

Evidence of Barry Wright

Mr Wright is a registered civil engineer, with over 20 years experience predominantly in the transportation sector. He is the Central Region Transportation Group Leader for Montgomery Watson Harza (MWH). He described his involvement in the project as Transit's consultant team leader.

Mr Wright's evidence traversed the current traffic environment at MacKays Crossing, including the crash record, traffic delays, traffic growth and Transit's objectives for the project. He described the options considered and the results of the evaluation of those options and gave a detailed description of the overall scheme, including the provision for TMG, the southern curve and the projected outcome.

Mr Wright commented on several matters raised in submissions and the officer's reports. His conclusions were that:

"In my opinion the project is required urgently to eliminate the conflict with the railway level crossing and thereby significantly improve the safety of the section of State highway. A secondary benefit is avoiding the delays that already occur and the increased delays that would occur as road and rail traffic growth continues.

"There is only one economically viable option and this option is strongly preferred on an environmental effects basis. The environmental effects of the project can appropriately remedied or mitigated.

"It is essential that the link to Transmission Gully is protected so that this is a feasible option in the future. However making this provision would not preclude the four laning of the existing State highway in the future."

Evidence of Howard Cheadle

Mr Cheadle is a chartered Town Planner, an associate Member of the Royal Town Planning Institute and a Affiliate Member of the New Zealand Planning Institute, with over thirty years experience. He is a Network Planning Manager at MWH , advising on planning matters within the Wellington Region Transit Network Maintenance Contract. He had been involved with the MacKays Crossing project for approximately eighteen months.

Mr Cheadle's evidence outlined the documents which had been submitted with the applications, described both the NOR and the resource consents and, in each case assessed their contents against the relevant provisions of the Act. He described the consultation undertaken and then assessed the NOR against the criteria of section 171 of the Act.

With regard to the resource consents, Mr Cheadle discussed the need for consent against the various WRC plans, that is the Freshwater Plan, the Discharge to Land Plan, the Soil Plan and the Air Quality Plan. He summarised by saying that he considered, after discussion with WRC staff, that the resource consents applied for covered the proposed works. He noted that additional consents will be needed once the details of mitigation measures have been developed. He also noted that the last minute realignment of the entrance to QE Park would require an additional culvert which he assessed would require additional consents from WRC. Transit proposed to apply for these if the current consents were granted and the NOR confirmed.

Mr Cheadle considered the project in terms of Part II of the Act. Mr Cheadle commented on the officers' reports which had been presented. He appended notes on Transit's position on the issues (proposed conditions) raised in the KCDC report, noting Transit's concern that a number of these related to mitigation measures outside of the boundary of the designation on land that Transit was not proposing to acquire, limiting Transit's ability to carry out such measures. He suggested such measures could be provided in a Heads of Agreement, and appended a document in draft form. Mr Cheadle also appended a draft Iwi protocol documents, which he said was intended to demonstrate Transit's willingness to co-operate and ensure that best practice would followed with regard to items of cultural significance that may be discovered.

With regard to the WRC report, Mr Cheadle said that he understood there was agreement about the predicted amount of sediment likely to be discharged by the works, that is the amount of sediment expected off the slopes had been correctly calculated. However he made several points with regard to the proposed stormwater pond on the southern part of the wetland that refuted the WRC officer's report. He said that the proposed mitigation measures including the pond had been carefully conceived and not only protect but enhance the wetland. He noted that Transit found the proposed conditions generally acceptable but still had some points of concern.

Mr Cheadle commented on submissions regarding the existing barn in QE Park and said that Transit was willing to undertake to move the building to a new location within QE Park close to its current site.

Mr Cheadle concluded his evidence as follows;

"In conclusion, I have been involved in the project for the last eighteen months and attended many of the meetings where on occasions strong views

have been expressed. I am pleased at the outcome as the co-operation of iwi, WRC, DoC, KCDC and Transit, as well as many of the land owners, has resulted in a scheme that not only addresses the serious highway deficiencies in this area, but also provides, through the mitigation measures proposed, an opportunity for the enhancement of a unique and a rare wetland environment in a location that is easily accessible to the public.”

Evidence of David Cameron

Mr Cameron is a scientist who has been involved in the water quality and aquatic ecology fields since 1984. He has been employed by MWH since 1994, and prior to that was a Water Resources Scientist with the WRC. He is member of the New Zealand Water and Wastes Association and the New Zealand Limnological Society.

His evidence was concerned with the potential effects of the proposal on aquatic ecology. He discussed the predicted sediment discharges with regard to both the Whareroa Stream’s invertebrate and fish populations, and the MacKays Crossing wetland. His conclusion was that:

“In my view the proposed construction works in the stream bed and the proposed discharges of sediment and storm water to the Whareroa Stream and the adjacent DOC wetland would have no more than a minor effect on the life supporting capacities of these water bodies. The potential adverse effects associated with these activities could be adequately mitigated by the implementation of an environmental site management plan and an erosion and sediment control plan.”

Evidence of Martin Robertson

Mr Robertson is an earth scientist with the Wellington office of MWH. He is member of the New Zealand Geotechnical Society and the American Association of Groundwater Scientists and Engineers. He has worked extensively in the Wellington region over the last 11 years.

He said that he had been asked to evaluate the feasibility of mitigation options for wetland areas impacted by the project, in particular advising on the practical implementation of mitigation options and assessment of water table issues. His evidence discussed geological factors affecting wetlands and the measures proposed to mitigate the loss of 1.7ha of wetland beneath the embankment of Stage 2 and of a further 1.8ha of wetland which would be truncated from the main reserve area.

Mr Robertson commented on the officers’ reports and several of the submissions. He drew a number of conclusions, which included that;

“The loss of a small area of wetland can be mitigated by enhancement of the remaining DOC Reserve and the wetland areas in Queen Elizabeth Park. The proposed mitigation works would not give rise to any secondary effects, such as lowering water table or flooding.

“The specific details of wetland mitigation have not been resolved however there is agreement between Transit, DoC and WRC that the most acceptable option is the enhancement of the WRC wetland within Queen Elizabeth Park. This area affords excellent opportunities for public access and education.

.....

"The provision of a permanent sediment pond and hydrocarbon interceptor in the wetland area would allow a higher level of protection for the wetland during construction and could be combined with primary measures such as silt fences to minimise silt discharge. Due to topographical constraints there are no suitable locations outside the wetland where a sufficiently robust pond could be created. In addition a pond on the western side of the road allows stormwater run-off from the completed road to be treated prior to entering the wetland.

...

"The Ohariu Fault is an active fault with a return period of between 1530 – 5000 years. A rupture on the fault will generate strong ground shaking throughout the region. Structures across the fault would be destroyed by ground rupture. Mapping has shown the fault trace to be remote from the most critical structure, the rail crossing, and infers the fault to continue on the inland side of the proposed alignment."

Evidence of Gavin Lister

Mr Lister is landscape architect and member of the New Zealand Institute of Landscape Architects. He is a director of Isthmus Group Ltd, a specialist landscape architecture practice and has fourteen years experience in a wide range of landscape design and assessment work. He said that his evidence would describe the landscape context, assess the likely landscape and visual effects, and compare the alternative route alignments.

In his assessment, he discussed the effects of the proposal in a number of contexts; the broad landscape patterns, the relic sea cliff, the wetlands, the amenity of QE Park (including the stables and trees), properties traversed by the designation and other nearby properties. He discussed mitigation in relation to sections of the highway and presented a Landscape Concept Plan which illustrated the proposals. This is attached as Appendix 2.

In conclusion, Mr Lister said that;

"The proposed route re-alignment is based on the best of the six options investigated in terms of avoiding adverse landscape and visual effects. The route best fits the wider landscape. It minimises effects on dune landforms, wetlands, and on Queen Elizabeth Park. It will also create the most interesting experience for road users.

"There will be significant adverse effects on the relic cliff landform and the DOC wetland. Effects on the cliff will be partly mitigated by re-vegetation of the cutting batters, and the effects on the wetland will be remedied by development of an equivalent wetland within Queen Elizabeth Park.

"There will be some adverse effects on the eastern boundary of Queen Elizabeth Park north of MacKays Crossing. However the opportunity has been taken by the Regional Council to design a major upgrade of this part of the park and the proposed remedial landscape works are intended to be integral to this broader plan. The net result on landscape amenity should be positive.

"There will be landscape and visual effects on four properties directly traversed by the alignment. Effects on three of these (Perkins, Sue Sang and Head properties) will be mostly limited to productive rural landscapes. The mitigation suggested could integrate the road back into such landscapes. The alignment avoids the houses on these properties so that any amenity effects on them will be minor. There will be more significant landscape and visual effects on Wharerua Farm including visual effects on the farm houses. However comprehensive mitigation measures have been proposed and it is understood agreement may be reached with the owners regarding these measures.

"I believe, therefore, the application avoids adverse landscape and visual effects as far as practicable and the remaining adverse effects will be satisfactorily remedied or mitigated."

Evidence of Karl Farrell

Mr Farrell gave evidence that he had been appointed iwi co-ordinator for the project by Transit in 1999. He reported on the consultation procedures he had helped facilitate, including several hui involving himself and other members of the project team. He said that a number of concerns had been raised with the original designation, the proposed designation and the realignment. However he believed these issues had been addressed. Some had been included in the draft Cultural Heritage Protocol which had been prepared by Transit. This was attached to Mr Cheadle's evidence.

He said that with regard to the realignment issues were raised pertaining to the urupa east of the SH1 and the MacKays family cemetery. He said these issues had been addressed and Ngaiwi were satisfied that these areas will not be unduly affected by the proposed construction or modification of SH1 at Mackays Crossing. He said that;

"In conclusion Ngaiwi are in favour of the proposed alignment and highway designation for this project as it does have less impact on heritage sites, cultural issues, and Wahi Tapu."

Affidavit presented on behalf of Ian Bowman

Ms Sinnott presented an affidavit on behalf of Mr Bowman who was unable to attend the hearing. Mr Bowman is an architectural conservator and architect, specialising in built heritage conservation. He had been commissioned by MWH to prepare a Conservation Plan for a farm structure located in QE Park, the MacKays Crossing Stables, or old barn. A copy of the Conservation Plan was attached to his affidavit.

In the Conservation Plan, Mr Bowman recommended that the MacKays Crossing Stables should be relocated to a site which is similar to the existing site. He said that although not of national or regional heritage value, its potential local history value warranted its relocation rather than demolition. He also listed repair work that should be undertaken and recommended a maintenance plan for the building should be written and implemented.

Appearances by Submitters

The following submitters appeared and presented evidence to support their submission.

The New Zealand Fire Service

Ms Sian Smith presented legal submissions on behalf of the NZ Fire Service. Her submission had been received by the Council a day late which Ms Smith said was a mistake on the part of the Fire Service. The Commissioners agreed to accept the submission by waiving, under section 37 of the Act, the time requirement to lodge it.

Ms Smith then outlined the obligations of the Service and said that the sole issue which had been raised related to the NOR and the location of median barriers on the proposed highway improvements. She said that consultation had not been cried out with the right people. Transit should have consulted with the Chief Fire Officer of the district where the designation would apply. In this case, two Fire Districts were involved – Paraparaumu and Paekakariki and the Chief Fire Officers had not been consulted.

Ms Smith said the recommendation on the NOR should include a condition or other provision to meet the concerns of the NZFS; specifically that: “*median barriers will only be present where there are two lanes on either side of the median*”. She attached a letter from Barry Wright, MWH of 25 September 2001, in acknowledgment of the NZFS submission and confirming that the median barrier is only present where there are two lanes on either side of the median.

Ms Smith called Mr Wayne Sarjeant, Chief Fire Officer of the Paraparaumu Fire District who spoke to the NZFS submission. Mr Sarjeant said that this was a volunteer brigade, he had been with the Fire Service for 25 years, and Chief of the Paraparaumu district for 9 years. He said that roading changes do have an impact and he preferred Transit and the local authorities to involve the service in consultation about improvements. He suggested that the brigade may have been overlooked as it was volunteers. Mr Sarjeant confirmed that the fire engines required an 11 metre turning circle.

Wellington Regional Council

WRC was represented by Maree Sanders, Statutory Policy Advisor. She said that the Council conditionally supported the designation for three reasons;

- The project will provide a safer entrance to QE Park, and is consistent with the WRLTS
- The existing designation would adversely affect QE Park to a much greater degree, and
- Transit had proposed mitigation measures for the adverse effects of the designation and the road construction.

Her evidence covered aspects of safety improvements, discussed alternative routes, the mitigation of adverse effects and she commented on several of the proposed conditions. She concluded;

“In summary the Regional Council accepts the designation is necessary to improve safety on the State highway at Mackays Crossing, considers the route

selected is the best option compared to the route already designated and others assessed as part of this project, and accepts the mitigation proposed by Transit.”

Mr Ross Jackson also spoke to the WRC submission. Mr Jackson is a parks planner and has responsibility for new developments within the QE Park. He confirmed the intention to develop access through the park and Whareroa farm into the Akatarawa block, and said there were negotiations with Landcorp to establish this and to make it a link on the North Cape to Bluff walkway.

Mr Jackson said that KCDC already provided two cycle routes through the Park, but that these were recreational and not suited for instance to groups of cyclists training or racing at speed. He also commented that the existing macracarpa trees which would be retained could be pruned to provide shelter for the relocated barn

Mandy Robinson - Stables on the Park

Mandy Robinson, who is the lessee and operator of the ‘Stables on the Park’ beside SH1 appeared and spoke to her submission. She said that the barn was one of two rural heritage buildings registered in the KCDC Plan as a historic building. She believed it had been built around 1900, and that it had been used by Maori teamsters and possibly as a staging post for horse drawn transport from Wellington. Ms Robinson operates a riding school in this area of QE Park. She does not use the barn as a stables but for storage and sometimes shelter. She said that it was a ‘shop front’ for her business, and that a lot of her custom was ‘impulse’ from passers by who saw the barn and were attracted in to the site.

Ms Robinson said that this would be lost if the barn was moved so that it could not be seen from SH1, and suggested consideration be given to moving the slip road so that the barn could remain where it was, between the new highway and the slip road. She also said that the shelter provided by the macracarpa trees would have to be replaced, and that drainage problems addressed so that run off from the embankment did not impact on already wet land. She tabled an evaluation of the trees, noting their probable age as about 120 years.

Dick Jessup – Coastal Highway Group

Mr Jessup spoke to the submission made by the Coastal Highway Group. He said that he was a member of the steering committee of the Group, the main aim of which was to support improvements of the coastal Pukerua Bay to Paekakariki route rather than reliance on the proposed TMG motorway. The Group’s rationale included that this route was less vulnerable to seismic damage, compared to the TMG route.

The Group supported the proposed early construction of the proposed MacKays Crossing overbridge, or Stage 1 of the project, but submitted that references to the Stage 2, the link to TMG should be deleted and that extending the four lanes south to Paekakariki should be considered instead. They also recommended that provision should be made to extend the double track of the railway to the north of the overbridge.

Christopher Horne

Mr Horne spoke to his submission which opposed both the NOR and the resource consents. He said that the project was inconsistent with the Resource Management Act because it would lead to the increased use of motor vehicles, encourage drivers to travel and attract passengers from train and bus services. It would also lead to the increased use of fossil fuels and increased pollution.

Mr Horne said that the project was inconsistent with NZ's commitment to the Kyoto Protocol, requiring a reduction in CO₂ emissions and said that it was wrong to say it would reduce delays and hence pollution as this was only in the short term and it would cause increased bottlenecks elsewhere. Mr Horne said the project was incompatible with parts of the RPS, parts of the Regional Air Quality Plan, including those to do with greenhouse gases and global air quality, and parts of the WRLTS, in particular those to do with "*developing a transport system which is environmentally and economically sustainable.*" He also referred to the prediction of peaking oil production about 2008, and said that increasing the capacity of the roading network inevitably produces 'induced' traffic. He believed the solution is more frequent train services.

Kevin Jefferies – Kapiti Coast District Council

Mr Jefferies spoke to the submission lodged by the KCDC in support of the application for the NOR. Mr Jefferies said that the Council supported the project provided consideration was given to several issues. These concerned the MacKays cemetery and the route of the highway.

Mr Jefferies said that the character of the cemetery, which was a Local Purpose Reserve, should be maintained. He suggested appropriate mitigation should include fencing the area, appropriate planting to screen it and the development of appropriate protocols in the event that artefacts or suspected archaeological remains were found there.

He said that he was concerned that the plans of the proposed highway did not show any indication of cycleways or lanes. Cycling was encouraged in the Kapiti district and he said a cycleway should be included with the project. He was also concerned at the creation of a railway crossing to access QE park from a safety point of view, and the need for a two lane north bound on ramp from the park was oversized. He suggested if it was reduced, the need to remove the macracarpa trees and barn may be avoided.

Sarah Bagnall –Department of Conservation

Ms Bagnall appeared on behalf of the Director-General of Conservation. She is Community Relations Officer (Planning) at the Wellington Conservancy of the Department. She spoke to the submission which had been lodged and sought that if the Commissioners recommended the NOR and approved the consents, a number of conditions were included. These related to ensuring contamination of the wetland did not occur, development of a sediment control plan, carrying out of mitigation works within the remainder of the wetland reserve, and making provisions to ensure Mr Head's land at the southern end of the Reserve does not flood.

Ms Bagnall spoke to both the resource consents and the NOR and detailed the above concerns. She also commented that the Department and Transit's representatives had had considerable discussion of the re-alignment options and mitigation. She noted that the option now proposed had greater impact on the MacKays Crossing (Wildlife) Reserve than some of the alternatives considered, but that the other alignments had a greater impact on the QE Park. She confirmed that the present proposal was the preferred option.

Allan Head

Mr Head is a property owner affected by the project. Mr Head's property is immediately to the south of the wetland area and the western part will be severed by the Stage 2 highway and embankment, which he said will stop him taking full advantage of his property. He was also concerned that the improvements to the southern corner, next to his boundary will make his access dangerous and this will need to be shifted further north.

Mr Head said also that there were problems of drainage of surface water from his property associated with development of permanent wetlands west of the railway and the culvert adjacent to the main drain. A weir had been removed from the Whareroa Stream which allowed gravel to move down the stream and block the exit of the drain.

He suggested that if the 'new wetlands' are to become permanent, a water level and control system needed to be put in place at the drain exit to Whareroa Stream. One of the options may be to raise the levels of the lowlands on his property.

In answer to questions, Mr Head agreed that his land did flood at the moment and there had been drainage problems for 20 years. He said he had a tentative agreement with Transit and they may build up his low land with some of the earthworks from SH1, but that even if Transit does raise the land, the levels need to be maintained to ensure the flow of water. Assurances are needed that the work will not increase levels on the downstream side, and that drains are maintained.

Anthony Edwards

Mr Edwards who is a retired geologist and resident of Otaihanga submitted that the NOR and associated applications would have effects that were inappropriate in terms of earthquake risk, damage to heritage sites and public safety. Mr Edwards gave extensive evidence in support of his submission. He advised that he was a member of the Royal Society of New Zealand and the Geological Society of New Zealand and that the submission was made with the full support of the Geological Society's Geological Reserves Subcommittee.

Mr Edwards discussed the Ohariu Fault, the landforms, other heritage features, the wildlife reserve, other public safety matters and he commented on an alternative route. Among other points, he referred to the research done to locate the Ohariu fault in the vicinity of the project and said that, in his opinion the Institute of Geological and Nuclear Sciences (GNS) had located the fault trace within about 20 metres and had correctly inferred that the fault changed direction at Te Ramaroa (Whareroa) Stream. Comparing geological and topographical maps, Mr Edwards said that the fault appeared to go directly along the proposed roadway and through the location of the highway underpass to QE Park. He said that there is a high long-term risk that, if built in this location, SH1 will one day fail catastrophically.

Mr Edwards asked that the NOR be declined, or that Transit undertake appropriate geotechnical studies to further define the fault in this area.

With regard to landforms, Mr Edwards pointed out the association of Sir Charles Cotton with the historical definition of landforms in the area, in particular the sea cliff which truncated the earlier alluvial fan. These were conspicuous features which would be affected by the project. He also described the development history in the area, including the US marine encampments during 1943 and 1944. Mr Edwards said that the landforms had been little modified. He cited a number of policies in the RPS which he said were reasons why the landforms should be protected. He also noted that the alluvial fan is listed as geological site in the Heritage register of the KCDC Plan.

Mr Edwards also noted that the usual tendency to mitigate earthworks by planting, especially trees can be very inappropriate in terms of retaining the value of a landform.

Mr Edwards commented on the value of the old barn, MacKays cemetery and the wildlife reserve. He noted that this had once been a canoe passageway and this may well be found to contain artefacts or human remains. He commented on safety issues with regard to the ground conditions of the area and the chance of earthquakes. He supported the call for provision of a cycle way, and noted problems associated with the need for an at grade rail crossing to enter QE Park. Mr Edwards finally noted that his contention that the environmental and heritage loss would be far less in following the existing designation, than in the adoption of that now proposed.

John Perkins

Mr Perkins had a brief written statement and spoke to his submission. Mr Perkins is a landowner who's property, to the south and adjoining Mr Head's land is affected both by the existing designation and that now proposed. It is significantly less affected by the new alignment as no land to the west of the railway will be required and a smaller area between it and the present highway.

Mr Perkins said that his property had been affected by designation for over 50 years and that had had a huge effect on his use of it and represented lost financial opportunities. He asked that the land no longer required for road reconstruction to have the designation uplifted immediately.

Christopher Glover

Mr Glover had made a late submission. He attended the hearing and asked that it be accepted, which leave was granted by the Commissioners pursuant to section 37 of the Act. Mr Glover then spoke to his submission and said that he opposed the route chosen and supported a route parallel to the railway line with an overbridge at Paekakariki. He said this was more direct and could include provision to divert some traffic over the Paekakariki Hill Road.

New Zealand Historic Places Trust and Wellington Tramway Museum Incorporated

Both the Historic Places Trust and Tramways Museum which had made submissions asked that letters be read at the hearing.

The Historic Places Trust said that it concurred with the KCDC officer's report with regard to its recommendation relating to cultural heritage. It agreed with Mr Bowman's recommendation that the historic barn/stable be relocated to a site which is similar to the existing site. The Trust also noted that it had already advised Transit of the need to apply for an archaeological authority for the entire route, prior to works being undertaken. It considered now that this should also include the area currently occupied by the barn/stable as it was possible that the building was there before 1900.

The Tramway Museum noted its previous support for the NOR and consents, subject to several conditions and qualifications. These related to the provision of signs, assurances about drainage, provision for the internal access road to QE Park to go past the tramways front entrance and for a future rail platform at Mackays Crossing. It was pleased to note that assurances had been received from Transit on all these matters, except for the internal access road which it accepted was a matter for resolution with the WRC.

The Commissioners noted that the anticipated signage provision was to be a brown tourist sign and would include QE Park, Tramway Museum and Horse Riding as three separate items. They requested that Ms Robinson be advised with regard to the proposed sign.

Applicant's Rebuttal Evidence

Transit recalled Mr Wright and Mr Robertson to give rebuttal evidence.

Mr Wright presented a supplementary statement to provide clarification on the dual function of the proposed pond in the wetland area. He discussed the pond's design and function, its construction and maintenance, the value of the area affected and its long term status. He concluded that;

"In summary the conversion of sediment control ponds to stormwater treatment ponds is logical and is becoming common practice. At completion the pond will provide open water habitat which will enhance the wetland area. Accordingly the works are necessary and beneficial and any adverse effects are minor and of a temporary nature."

There was some discussion with Mr Wright about the use and design of such ponds. He noted that they were generally designed in accordance with the ARC publication, TP10, and said that a TP90 pond could be converted to a TP10 design. This had been done in Manakau, but not in the Wellington region to date.

Mr Wright also spoke to the concerns raised by the Fire Service. He said there would be room for a fire engine to turn. With regard to the provision of a cycle way he said that it was not intended to provide a specific cycle lane but that there would be a 2.5m shoulder on the highway which could be used by cyclists. The shoulder on the slip lane and access road to QE Park would reduce to 1.5m but there would be less and slower traffic on these roads. He confirmed that there would also be a shoulder on the roundabout.

Mr Robertson spoke further with regard to the location of the Ohariu fault, the stability of the proposed cuts and the questions of landform protection. He tabled plans and information from a 1998 paper on the location of the fault. There was some

discussion on the accuracy of the grid references and it was suggested Transit might contact the authors of the paper to obtain clarification.

Council Officers' Further Comment

Ms Kolff, for the KCDC referred to the list of issues which were appended to her report. She said that there had been discussions with the applicant and agreement had largely been reached on what would be appropriate to include in the conditions. She said that some matters were already covered under proposed conditions to the WRC consents and some would be better resolved as an advice note, rather than a condition. She verbally covered the various matters. It was agreed that there should be further discussion with the applicant on several matters, in particular on the formulation of a condition covering the Heads of Agreement anticipated to be developed between the Council and Transit covering a number of mitigation matters proposed but on land outside of the designated area, and that the applicant would advise the Commissioners further with regard to the final schedule of proposed conditions.

Ms Wilks also presented final comments on behalf of the WRC and referred back to a number of matters noted in her initial report. With regard to the question of stormwater discharges, she reiterated that in her opinion consent was not required for the operational discharge of stormwater, and that a 7 year duration was appropriate for the discharge permits to cover construction related discharges. She summarised by saying that;

“..consent is required for discharges during the construction of the proposed works only, and that the long-term operational stormwater discharge remains a permitted activity unless proved otherwise.”

However, Ms Wilks said that with regard to the permanent sediment pond proposed in the MacKays Crossing wetland, Transit had presented additional evidence about this and that she had reviewed her earlier recommendation. She now considered that the permanent use of space of land for the ‘wetland friendly’ stormwater treatment device had much merit and was sustainable in terms of Part II of the Act. Ms Wilks suggested changes to the proposed conditions to allow for the pond.

Ms Wilks still did not consider a land use consent was required for the rail overbridge works, and also commented on several other of the proposed conditions that had been discussed between WRC and the applicant. She said that agreement had been reached in most areas, noting only a couple of residual but significant differences.

Applicant's right of reply

Ms Sinnott presented final legal submissions for Transit, and addressed a number issues which had been raised by submitters and the Commissioners. In particular she addressed

- The two stages of the project
- Other proposals for highway improvement
- Consideration of Alternatives
- Provision for cyclists
- Proposed permanent sediment pond and hydro-chemical intercept
- Effects of sediment generated during construction

- WRC proposed conditions
- KCDC proposed conditions
- Access to QE Park
- The barn and trees in QE park
- Issues for local iwi
- Mr Head's land
- Proximity of the fault
- The alluvial fan and sea-cut cliff.

In conclusion, Ms Sinnott reiterated that the Commissioners should recommend the NOR and grant the resource consents. She said the evidence had shown that these met the relevant threshold tests in terms of the Act, and she set out a number of points showing that the project was appropriate, having regard to Part II of the Act and the relevant considerations for the NOR and the resource consent applications.

THE NOTICE OF REQUIREMENT

RMA, Section 171

Section 171 (1) of the Act sets out the matters which the territorial authority has to consider in making a recommendation with regard to a NOR, as follows:

- (1) *Subject to Part II, when considering a requirement made under section 168, a territorial authority shall have regard to the matters set out in the notice given under section 168 (together with any further information supplied under section 169), and all submissions, and shall also have particular regard to—*
- (a) *Whether the designation is reasonably necessary for achieving the objectives of the public work or project or work for which the designation is sought; and*
 - (b) *Whether adequate consideration has been given to alternative sites, routes, or methods of achieving the public work or project or work; and*
 - (c) *Whether the nature of the public work or project or work means that it would be unreasonable to expect the requiring authority to use an alternative site, route, or method; and*
 - (d) *All relevant provisions of any national policy statement, New Zealand coastal policy statement, regional policy statement, proposed regional policy statement, regional plan, proposed regional plan, district plan, or proposed district plan.*

We consider those criteria below.

The Necessity for the Designation

It was submitted by the applicant that the necessity of the NOR related to the requiring authority's objectives for the project or work, whether the nature of the work in fact met those objectives, and whether the designation was then reasonably

necessary as a form of approval under the RMA to achieve the objectives of the project or work.

Transit's objectives for this work have been set out. These relate to the safety aspects of the highway, the need for efficiency by reducing conflict between vehicles and trains, the provision of safer and less congested access to the QE Park, and finally, the provision for a connection between SH1 and TMG Motorway when this is built. We consider that the project as described to us well meets these objectives, and further that the designation is the appropriate means to provide approval and authority under the Act for this work.

The project is designed to be divided into two stages. This was discussed during the hearing. Resource consents have not been sought for the Stage 2, which will provide the link between SH1 and the TMG and it was acknowledged that this will occur further into the future, dependant on timing for the TMG. This connection is set out as the fourth limb of the objectives.

It might be argued, and was put to us by submitters, that the project should be further divided, that Stage 2 was not a necessary part of the project and should be considered separately, sometime in the future. However we believe that it is appropriate that the two stages be designated together, notwithstanding that only the first part of the works, the overbridge, is to be constructed in the near future. It is consistent with Transit's objective to provide a connection to the proposed TGM, and while the later, or Stage 2 works may be sometime in the future, we consider it appropriate that the whole route be protected now.

It is important that this will allow Transit to uplift the existing designations now, and it has said that it will do this. The existing designation anticipated a more southerly rail overbridge, in effect an extension of the TMG, and linking to the line of an earlier designated route not now to be developed, the 'Sandhills motorway'. It will be beneficial to affected landowners for Transit to uplift these earlier designations. They will get more surety, as well as being less affected, by the replacement.

We agree with the analysis given the KCDC officer's report, that, given the project objectives as stated in the NOR, the designation of the route is a reasonably necessary and appropriate means of securing the land sought by Transit to give effect to the project, in particular for the Stage 1 works. We further agree that Stage 2 will provide for a safe and efficient connection between SH1 and the proposed TMG. It is a necessary link to Stage 1 and hence is also reasonably necessary when assessed as part of the entire project.

We also consider it is appropriate to allow the 15 year lapse time sought by Transit for the NOR. Anything less would not be adequate to reasonably link to the proposed TMG in a timing sense, given its present proposed start date of 2014.

Adequate Consideration Given to Alternatives

It is necessary to assess whether adequate consideration has been given by the requiring authority, Transit to alternatives sites, routes or methods of achieving the project. In this case consideration of alternative routes is relevant. There is precedent established in this area which defines the tests to be applied. The test is that Transit has not acted arbitrarily and that the consideration given to alternatives has been more than cursory; it is not necessary that the best alternative has been chosen.

We were told that six routes had been examined and their impacts of each evaluated. These all linked to the proposed TMG route and had a railway overbridge replacing the existing level crossing. None exactly followed the existing designation, several swung further west into QE Park with a more southerly elevated crossing. The now proposed alignment was assessed as Option 5 which was seen as having the least adverse effects on the surrounding environment, in particular as it avoided directly crossing QE Park. Construction of this route will be easier, and it has the advantage that the project can be staged - the rail crossing can proceed immediately ahead of the second part, the connection to the TMG.

The KCDC officer's report noted that the proposed route does not relate to existing problems of access to SH1 for Paekakariki residents, and that in the event that Stage 2 of this designation is not implemented, measures would need to be put in place to ensure that improved access to Paekakariki is addressed. This however relates to works outside of the designation area, and while this may become a question in the future it is not part of this assessment.

The KCDC officer's report also notes that the route was preferred by the majority of local residents and interest groups. We had evidence from Mr Perkins, an affected landowner that the impact on his property was significantly less than of the existing designations, and also less than that of Option 3, the line which most closely followed the old route. Mr Edwards in his evidence questioned the evaluation of the impacts on the environment and heritage features of the proposed route as compared to the existing designations. He said that part of the 'Sandhills' route was along a disused track on the west of the railway and not high value wetland. However we agree with the KCDC officer's report that overall the preferred route offers improved State highway efficiency and safety with the least costs and the least adverse effects on the environment and adjoining landowners.

The Commissioners consider that adequate consideration was given by Transit to the evaluation of alternative routes.

Unreasonable to use an alternative route

This criterion is set to establish whether there is any question of the reasonableness of the preferred option, given the nature of the work or project. In this case the Commissioners accept that the proposed designation is a reasonable way for the requiring authority, Transit, to meet the objectives of the project, and alternatives do not have to be further considered in this context. The KCDC officer's report also notes that Transit has demonstrated in the application that the proposed methods will mitigate any adverse effects to its best ability. Proposed methods of carrying out the works are known and accepted.

All relevant policy and plan provisions

A number of policy and plan documents were cited as relevant in this regard. In particular the following are deemed of significance:

- Wellington Regional Policy Statement
- Wellington Regional Plans (Air, Freshwater, Soil, Discharges to Land)
- Wellington Regional Land Transport Strategy

- Kapiti Coast District Council District Plan

The Wellington Regional Policy Statement

The Wellington Regional Policy Statement (RPS) became operative on 15 May 1995. Relevant objectives and policies are found in:

- Chapter 4 – Iwi Environmental management System
- Chapter 5 - Fresh Water
- Chapter 6 - Soil and Minerals
- Chapter 8 - Air
- Chapter 9 - Ecosystems
- Chapter 10 - Landscape and Heritage
- Chapter 11 - Natural Hazards
- Chapter 12 - Energy
- Chapter 14 - The Built Environment and Transportation.

We were told that with regard to iwi management, consultation had been extensive and ongoing. While evidence was presented in this area, there were no issues of substance brought to our attention. Policies with regard to freshwater included both surface and groundwater issues. Policy with regard to soils and minerals cover effects arising from the proposed earthworks, installation of culverts and construction of sediment ponds.

Objectives for air deal with sources of emissions, including mobile sources such as motor vehicles. Policy with regard to ecosystems relates to the loss of wetland in the DOC wildlife reserve and the proposed mitigation by creation of a new wetland area within QE Park, also the proposed enhancement of wetlands and management of the permanent sediment pond to mitigate degradation of the quality of the natural ecosystem.

We were told that the sea cliff is listed in the *Inventory of Important Geological Sites and Landforms in the Manawatu and Wellington Regions*, of the RPS, but not so that it should be regarded as an outstanding geological feature. The barn/stables in QE Park has local historic value but not regional significance. With regard to natural hazards, the Ohariu fault is recorded close to the east of the highway and the economic analysis of options had reflected this risk.

With regard to energy, the proposed route is designed to ease congestion and waiting times, hence improve efficiency. We were also told that the proposal is consistent with objectives for the built environment and transportation in the region.

Wellington Regional Freshwater Plan

The Wellington Regional Freshwater Plan (WRFP) has been operative since December 1999. It applies to all freshwater fisheries in the region. The MacKays Crossing Swamp (DOC Wildlife Reserve) is listed in Appendix 2, Part B of the plan, to be managed for aquatic ecosystem purposes. Provisions of the plan relate to the works insofar as these involve discharge of stormwater, provision of culverts in the Whareroa Stream, provision of a sediment pond and works in the wetland. Resource consents are sought from WRC under this plan.

Wellington Regional Discharge to Land Plan

The Wellington Regional Discharge to Land Plan (WRLP) also became operative in December 1999 and applies to all types of discharge to land, including stormwater. Construction work will involve removal and movement of soil to form batters and the embankments for the overbridge and new road to QE Park. Again these works are subject of resource consents.

Wellington Regional Soil Plan

The Wellington Regional Soil Plan (Soil Plan) became operative in October 2000. It is concerned with effects of soil disturbance and vegetation clearance on erosion prone land. A land use consent for earthworks associated with the cutting is required under this plan.

Wellington Regional Air Quality Management Plan

The Wellington Regional Air Quality Management Plan (Air Plan) became operative on May 2000, and was prepared to promote sustainable management of discharges to air, including from mobile transport sources such as motor vehicles. The plan recognised the need for more comprehensive initiatives to reduce discharge of contaminants from such sources.

The Regional Land Transport Strategy

The Regional Land Transport Strategy (RLTS) came into effect in October 1999. Its vision is to achieve “*A balanced and sustainable land transport strategy that meets the needs of the regional community*”.

The strategy divides the region into two ‘corridors’ that link the main urban areas of the region to each other. The Western corridor, from Otaki to the Ngauranga Merge of SH1 and SH2 includes the MacKays Crossing area. The strategy identifies a number of needs and issues within this corridor, including peak period road congestion during weekdays and at weekends, increasing demands for access along the corridor because of the population growth on the Kapiti Coast and insufficient alternative access ways and high accident rates.

The safety improvements to MacKays Crossing is recognised in the RLTS as a project that needs to be completed by 2004.

Kapiti Coast District Council District Plan

The Kapiti Coast District Plan became fully operative on 30 July 1999. The relevant objectives and policies are variously contained in the following sections of the Plan:

- | | |
|--------------|-----------------|
| Chapter C.2 | Rural Zone |
| Chapter C.6 | Tangata Whenua |
| Chapter C.7 | Earthworks |
| Chapter C.8 | Heritage |
| Chapter C.11 | Ecology |
| Chapter C.14 | Noise |
| Chapter C.15 | Natural Hazards |

Chapter C.18 Transport

The land within the designation area is zoned rural. Part of the designation is already covered by existing designations G101 (State Highway One), G0 104 (Sandhills Route) in the District Plan, and part by a proposed Notice of Requirement for the TMG Motorway Route (GO 103) that is currently subject to appeal.

The WRC is the requiring authority for the designation of QE Park (GO 401). The Plan requires Transit to consult with the WRC prior to the preparation of any outline plan for the construction of the highway, hence the impacts of the proposal on the ecological values of QE Park and access to the Park can be managed through the provisions of the outline plan.

Similarly to the RPS, the policies to do with natural hazard identify the Ohariu fault as a feature of the Paekakariki area and note that the WRC Combined Earthquake Hazard Map identifies the area immediately east of SH1 as being a ‘high hazard area’.

It is noted that the proposed designation is consistent with the objectives and policies relating to Transport, in that the works will provide for the efficient and safe movement of people and goods throughout the District.

In summary, we consider all relevant policies and plans have been well covered, in discussion of the officers reports and in evidence given to the hearing. We consider these have been recognised in the development of the project and that the design of the works are generally in good accord with relevant policies and plans.

The relevant parts of all policy and plan documents were attached to the Council Officers’ reports and available at the hearing. These are not set out again, but may be accessed at the council offices.

THE RESOURCE CONSENTS

Activity Status

The detail of which activities that needed to be covered by the consents required from the WRC for the MacKays Crossing project was the subject of several submissions by the applicant and consent authority. These are referred to elsewhere in this report. Both parties however agreed that the general description of the proposed activities and their status under the respective regional plans are as summarised in the table below.

Plan	Consent & Application	Activity	Status/Rule	Proposed Location
WRC Freshwater Plan	Stormwater Discharge	Discharge of stormwater to freshwater	Rule 1 Permitted, Rule 2 Permitted	See Drawings No A7 (a)(b)(c)(d) Appendix A7
	<i>WGN010162 [21707] & WGN010162 [21043]</i>	Discharge of contaminants to freshwater otherwise not provided for.	Rule 5 Discretionary	Appendix D and Appendix E
	Water Permit <i>WGN010162 [21706]</i>	To temporarily dam and divert water during in-stream works, installation of culverts and other construction activities.	Rule 16 Discretionary	
		To divert water away from an area of wetland through the construction of a sediment pond.	Rule 18 Non-complying	
	Land Use <i>WGN010162 [21042]</i>	To install culverts and associated works, and other in-stream works.	Rule 49 Discretionary	
		To reclaim an area of wetland through the construction of a sediment pond.	Rule 50 Non-complying	

Plan	Consent & Application	Activity	Status/Rule	Proposed Location
WRC Discharge to Land Plan	Stormwater Discharge	Stormwater discharges from State Highway to land, permitted subject to standards. Discharge of contaminants to land in the course of the construction, maintenance and repair of roads and sealed areas permitted subject to standards.	Rule 1 Permitted, Rule 3 Permitted Rule 18 Permitted	See Drawing No A7 (a)(b)(c)(d) Appendix A7 Appendix E Sediment Control Principles
	Discharge to Land <i>WGN010162 [21708]</i>	Discharge of contaminants not otherwise provided for.	Rule 2 Discretionary	
WRC Soil Plan	Land Use <i>WGN010162 [21044]</i>	Earthworks which will result in a continuous length of more than 200m of road having an upslope batter height of greater than 2m measured vertically.	Rule 1 Restricted Discretionary	Section of road running up to overbridge. See drwg. no A8, Appendix A8
WRC Air Plan	Land Use	Spraying of weeds. Road construction activities.	Rule 1 Permitted Rule 22 Permitted	Road Construction methodology yet to be developed

Applications for the discharge of contaminants to water, that is to the Whareroa Stream (21707) and the MacKays Wetland reserve (21043), are deemed to be discretionary insofar as they may include contaminants not otherwise provided for as permitted activity under the WRFP. Similarly the application for the discharge of contaminant to land (21708) is deemed discretionary under the rules of the Discharge to Land Plan.

Both applications which relate to the ‘permanent stormwater pond’, that is the water permit (21706) and the land use consent for work in the bed or a river or lake (21042),

are to be assessed on a non complying activity basis, as in each case, part of the ‘bundle’ associated with the pond is outside of the limits allowed by the rules of the Freshwater Plan. The application for earthworks related to construction of the batter slopes (21044) is a restricted discretionary activity under the rules of the WRC Soil Plan.

No consents were deemed to be required under the Air Quality Plan.

Consideration of applications

In her report to the hearing, Ms Wilks of the WRC said that the matters to which the WRC (as consent authority) shall have regard when considering applications for resource consents and related submissions are set out in Section 104 of the Act.

Section 104 of the Act establishes the broad criteria assessment of any application. It primarily invokes the consideration of effects on the environment, and refers to other policy or plan instruments and matters which may be deemed to be relevant. Ms Wilks listed the following;

- Part II of the Resource Management Act, Sections 9, 13, 15, 104, 105 and 107;
- The Regional Policy Statement for the Wellington Region;
- The Regional Fresh Water Plan for the Wellington Region;
- The Regional Soil Plan for the Wellington Region; and
- The Regional Discharge to Land Plan.

Section 9 of the Act sets restriction on the use of land that relates to the WRC plans, section 13 sets the criteria for restriction of certain uses of beds of lakes and rivers and section 15 relates to the discharge of contaminants into the environment.

Ms Wilks referred to a number of WRC policies relevant to the project. In particular, with regard to the wetland, she noted Policy 14 of the RPS, which is;

“To protect the healthy functioning of wetlands and their biological communities from the inappropriate effects of land and water use..”

Policies of the RWFP are then focussed toward wetlands. Policy 14.2.27 is;

“This policy encourages the restoration and rehabilitation of freshwater generally. In particular, the creation of new wetlands is highly desirable.”

Other policies of the RWFP noted include the need to avoid adverse effects on a listed water bodies (including the Mackays Crossing Wetland), Policy 4.2.10; and to protect river and lake beds, including wetlands from adverse effects of works, Policy 7.2.15.

With regard to a non complying activity, the provisions of section 105 must be considered as well as section 104. In particular section 105 [2A] states that a consent authority shall not grant a resource consent for a non-complying activity unless it is satisfied that –

- (a) *The adverse effects on the environment will be minor; or*
- (b) *Granting resource consent will not be contrary to the objectives and policies of the plan or proposed plan.*

The criteria for a non-complying activity are relevant only to those consents required for the permanent stormwater pond, noted above.

PART II RMA

Consideration of both the recommendation for the NOR, under section 171 and decisions on the resource consents pursuant to section 104 is ‘subject to Part II of the Act’. This is an overarching consideration and requires reference to the sections of Part II as well as under the purpose and principles of the Act.

‘Sustainable management’ is defined under section 5(2) as meaning:

...managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—

- (a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- (b) *Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- (c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

We note that the Commissioners are satisfied that the project is entirely consistent with the purpose and principles of the Act. Generally improving the safety and efficiency of a portion of SH1 in our opinion is in accord with the social and economic wellbeing of the community. It was submitted to us by Mr Horne that the highway improvement would lead to additional traffic and increased emission of gases. The case of the applicant was that the increase in efficiency expected as a result of the works would in fact lead to a reduction of such emissions at the local level. Such factors must be considered pursuant to Part II. In this case, we consider that there will undoubtedly be increased efficiency as a result of the works, and we accept the evidence that ‘induced’ traffic is not a relevant consideration. Overall any increase in emissions that may occur is likely to be as a result of general traffic increase on the highway, rather than as a result of this improvement.

A number of the policies relevant to the project, in particular of the RPS and RWFP are to do with the protection and improvements of ecosystems, especially wetlands. In our opinion accordance with such policies is also accordance with the instruction of Part II to ‘safeguard the life supporting capacity of .. water.. and ecosystems’.

Mitigation measures have been proposed to address potential adverse effects on the environment. In particular, effects on the adjacent wetland area which will occur when Stage 2 works are constructed will be mitigated by the development of a replacement area in the initial stage of the works.

Other matters to be considered under Part II of the Act are discussed below.

Section 6: Matters of National Importance

Several matters listed under section 6 are possibly impacted by the project. We agree with the KCDC officer’s report that the impact of the project on the Wetland Reserve

is not inappropriate, and that there are no outstanding or nationally significant features which will be affected. It is noted that the Wildlife Reserve is possibly a significant habitat of indigenous fauna, but mitigation measures will work to offset adverse impacts on the area. The relationship of Maori and their culture, also a subject of section 6, has been covered in the consultation undertaken, the results of which we were told were has led to development of a satisfactory protocol.

Section 7: Other Matters

Other matters under this section include amenity values, intrinsic values of ecosystems and heritage sites. Again, we consider that although some of the features of a project of this nature are such that there will be inevitably be impacts in some of these areas, the development and design of the project has been such that we consider it can be achieved without compromise to this section.

Section 8: Treaty of Waitangi

As noted there has been consultation with iwi for several years. A satisfactory protocol is has been established in the event that cultural heritage is disturbed by the works. We consider that the requirements of section 8 are met in this regard.

ISSUES

General

The project for which affirmation is sought from us is the first of two stages. Stage 1 is a standalone project, and includes some preparatory work for Stage 2, notably in wetland mitigation. Stage 2; on the other hand, is contingent on a successful application to construct the TMG project, and approvals for Stage 2 will be sought as part of progressing this project.

At the end of the hearing and after assessment of the evidence, it appears that there are few major issues or matters of dissension between parties. Traffic matters were in little contention, with the need for safety and efficiency improvements at MacKay's crossing being generally acknowledged by the witnesses who appeared at the hearing, with the exception of Mr Horne who was concerned at any increase of road capacity.

The main issues that emerged during the hearing related to the effects of the proposed works on the surrounding land, notably the wetlands, also effects on the local landforms, of previously unrecognised importance, in particular the geological feature of the sea cliff and the question of seismic risk associated with the Ohariu fault. These and other effects, on QE Park and other landowners, cultural concerns, the position of the old MacKay family cemetery, provision for cyclists, visual and noise effects are discussed below.

Wetlands

The effect of the proposed project on existing wetlands, and the mitigation measures proposed are a key component of our consideration of the project proposal. The need for mitigation measures results from the loss of 3.5 Ha of wetland within the triangular 9 Ha area of DOC land, bounded by the railway line on the west, Mr

Head's land on the south and SH1 on the east. This is known as the MacKays Crossing Wildlife Management Reserve.

The total of 3.5 Ha of lost wetland consists of 1.7 Ha beneath the embankment footprint, and 1.8 Ha which will be severed from the main reserve as a result of construction of the proposed route (Option 5). While this will not occur until construction of the embankment in Stage 2 of the project, Transit have agreed to do the mitigation, or enhancement works immediately, together with Stage 1 construction.

Significance of the Wildlife Reserve

This is an important wetland, but it is not "pristine," and is drained to avoid flooding on Mr Head's property, by agreement. This drainage system would not enable return of the land to prime wetland habitat. It is an important link in the chain of remaining wetlands in the region. It is a key "stepping stone" between the more extensive wetlands and estuaries to the north and the wetlands of the Porirua Basin to the south, thereby facilitating wetland bird movement and gene flow. Rarer birds are present infrequently.

The WRC officer's report notes that the area managed by DOC is highly ranked because it is "*one of a dwindling number of remnant wetlands that once characterised the inter-dune spaces of this highly modified ecological district.*" DOC believe that the reserve has the potential to be of significant heritage and paleo-environmental value.

Hydrology of Wetlands

The greater area of wetlands of interest in this vicinity are, broadly speaking, bounded by SH1 on the east and south, but the southern area has been subjected to development as both farmland and as market gardens. To the west, the boundary is the dune field, and to the north, the low lying land continues to Poplar Avenue. This area includes both the DOC reserve, discussed above, and wetland areas of QE Park.

The direction of fall is roughly south to north, but the rate of fall is slow. The depth of water across the wetland is shallow and moderately high water clarity is evident. A general lowering of groundwater levels in this area has occurred since 1981, possibly as a result of drain diversion. The general area is drained by a series of artificial channels connecting lagoons and swamps to the Whareroa Stream, the southern tributary of which crosses SH1 at MacKays Crossing.

Inflow from off the hills enters the wetland as seepage from beneath SH1 and from Mr Head's property, crossing the railway to the north via a 1200 mm culvert. Mr Head's property was originally part of the impounded swamp and is only slightly higher than the invert of the railway culvert outlet. Very low water flow velocities in the area result in partial blockage of conduits, both channels and culverts.

Surface water ponds in the low ground east of the coastal sand dunes are primarily maintained by shallow groundwater levels, which vary strongly with season. The water level in the wetland can fluctuate by up to 800 mm during sustained rainfall.

Ecology of Wetlands

The general wetland in the area is dominated by a dense cover of raupo with flax, and tall rushes are common around the margins. Areas of open water are limited.

Waterfowl inhabitants include the Australasian Bittern, Grey and Mallard Ducks, and it is thought that the Banded Rail and Marsh Crake also live there.

The MacKays Crossing Reserve itself has not been comprehensively surveyed for native fish, and surveys in the drain next to the railway line have not revealed species of significance.

Three ephemeral wetlands within QE Park, which were identified and examined in a 1999 report are no longer affected by the project, as a result of finalising the preferred alignment. Nevertheless, they provide an indication of botanical value in the area. No fewer than 44 plant species are contained in one area ('Wetland 3') in the southern area of QE Park), including the nationally rare grass *Amphibromus fluitan*, as well as some regionally rare species. Nesting opportunities for waterfowl (pukekos and bitterns) are provided by the cover in ('Wetland 1'). The DOC Wildlife Management Reserve has comparable cover.

Mitigation Measures Proposed

The area proposed for development as 3.5 Ha of wetland is bounded on two sides by the entrance to QEP and the railway line. The land concerned is outside of the area of the designation, but the proposal to use this land is brought into the ambit of the project through the Heads of Agreement between the Applicant, WRC and DOC. This was tabled in draft form and its completion made subject to condition of the NOR.

Further mitigation is proposed, to improve the wetlands at the northern end of the DOC Reserve through the creation of areas of open water and planting. We heard from Mr Robertson for the Applicant that the proposal to develop this area by excavation of open water areas during construction "*would simply be turning the clock back on the natural infilling process that has led to the accumulation of the peat deposits. Because peat has accumulated under these conditions, it is reasonable to conclude that significant drainage of the present wetlands would not occur as a result of the excavation of open water areas.*"

We agree with this. Excavation of open water areas is expected to improve habitat diversity. This would be further enhanced through the planting of suitable native species.

DOC has agreed in principle to the mitigation measures proposed, and WRC has agreed to the area in QE Park which is within their management, as suitable for rehabilitation as wetland. The fact that these two landowner parties are essentially in agreement is significant. The evidence presented to us is that the area proposed for development is currently of only modest quality as wetland, but with potential for rehabilitation.

We support the wetland mitigation works proposed, and believe that it should result in a net improvement to the quality of wetland in the area. We concur with the potential expressed by Mr Robertson for the wetland development project to "*increase the public profile of the area and could act as a flag-ship for a wider restoration project.*"

Sediment and Stormwater

There was some disagreement between applicant and WRC as to calculations of the base quantity of natural sediment discharge into the catchment. WRC considered that it was roughly 10% of the Applicant's estimate. More importantly, however, there was substantial agreement on the additional quantity which would be discharged resulting from construction of Stage 1.

Mr Robertson said that a sediment pond between the works and the wetland would ensure that sediment discharge to the wetland was minimised during construction. It would be the back-up that safeguarded the wetland. Other sediment mitigation measures (silt check fences and smaller ponds) were likely to be required closer to work areas.

The triangular area in DOC's land is the proposed site for the sediment pond. The pond will be located near the southern point of intersection of the Stage 2 construction with the existing SH1 alignment. DOC has agreed to the siting and the topography of the area precludes alternative locations. The WRC officer's report initially opposed the siting of this pond on grounds of the adverse effects on the wetland, but in her final comments the officer said that further evidence presented by the applicant had satisfied her concerns and she was agreeable to its construction subject to several conditions, which have been adopted.

The Applicant also advised that an Environmental Site Management Plan would incorporate requirements for monitoring sediment discharge into the stream and the wetlands during construction of Stage 1. These matters are covered in conditions.

The treatment pond will be designed in accordance with ARC TP90, with area larger than the theoretical minimum. It is proposed to convert this into a permanent stormwater treatment device/hydrocarbon interceptor at completion of Stage 1 earthworks using ARC TP10. This will provide protection of the wetlands from road run-off, which has been requested by DOC. The 200 square metre pond will be planted with raupo and the bunds with flax, thus providing open water habitat to enhance the wetland area.

With regard to the Whareroa Stream (discharge from which would not pass through the settling pond), we heard that the increase in sediment during construction would be small compared to what is being carried already. There would be only a small amount passing through sediment control measures (silt check fences etc) and moving into the DOC Reserve. Disturbance to the sediment load in the Whareroa Stream bed would be in the nature of increase during transient high rainfall events, and normal clarity was expected to return in a matter of days following flood flows. During construction of in-stream works, suspended solid levels were expected to approach background levels at the close of work each day. Deposition of sediment from the main construction works would occur mainly in low flow areas, including stream margins, rather than in the main channel. 'Sediment inundation' would only occur if the sediment control measures failed completely.

In summary, from the evidence before us, we are satisfied that the mitigation measures proposed should ensure that, in time, the overall quality of wetlands in the area will be enhanced, and the quality of runoff from the road into the wetlands will be improved.

We think that the mitigation measures proposed have potential to lift the public's awareness of wetland ecology, through presenting and publicising an improved wetland environment at a site which will be far more accessible than at present, as a result of the project.

Sediment discharge during construction will, in our view, be able to be controlled through the sediment pond proposed, together with upstream works proposed (silt fences etc). We note agreement between the Applicant, WRC and DOC on essential components of the sediment treatment pond, including its proposed location, and its decommissioning and subsequent development as a permanent pond cum hydrocarbon interceptor. We think that this proposal is commendable, and understand that it will be the first in the Wellington area.

Whareroa Stream

This is not part of wetland consideration, but of interest because of the potential for the works to have detrimental effects on fish life.

The Whareroa Stream is the northern boundary of the hydrological catchment. Upstream of SH1, it is a small rural stream, significantly affected by agricultural development. As part of construction of the proposed Stage 1 project, the stream will be routed through culverts. Of interest to us is the effect of these measures on the ability of migration of fish species. We note that there are obstacles already in place downstream of the construction proposed: the stream drops about 300 mm at the outlet to the twin culvert under SH1, then 400 mm from the concrete pad to a natural level, which impedes migration of non-climbing fish species. Only a small depth of water is present at culvert invert, further limiting fish migration. We also heard that the lower reaches of the stream, with shallow, vegetated banks, provide a good location for spawning in the area.

A small farm bridge upstream of SH1 has a concrete floor, raised above the stream level, and provides a further obstacle to swimming species. The upstream gradient of the stream is steep, but reduces greatly on the west side of SH1 and the railway line.

Fenced banks upstream of the railway bridge has permitted development of overhanging vegetation and some good quality invertebrate and fish habitat.

We were advised that the Whareroa Stream has been significantly modified by forest clearance, wetland drainage, farming development and construction of the SH1 culvert. The taxa richness and MCI indicates moderate organic enrichment, and reflects the influence of sheep farming activities upstream of SH1. Nevertheless, fish surveys reveal that climbing species including redfin bully, banded kokopu, short jawed kokopu, kaoro, lamprey and long finned eel are probably able to penetrate upstream past the present SH1 culvert.

We are of the view that the proposed culverting of Whareroa Stream will not detrimentally affect the fish life currently in it. There are already significant steps impeding fish migration in the existing drainage path, and breeding sites exist downstream of the proposed drainage works.

With regard to the impeding effects of the culverting of sections of the Whareroa Stream, we do not believe from the evidence before us that significant detrimental effect on fish activity will result.

Landscape and Landform

In general terms, the landscape in the vicinity of the proposed overbridge is defined by the eastern hills which are bedrock mantled with gravel fans. An ancient sea cliff, eroded into these deposits, forms the coastal escarpment east of SH1. Seaward (west) of this, a sequence of coastal sediments has been deposited. The seaward dunes have impeded drainage from the hills and caused large lagoon areas to form.

Eutrophication has led to the build-up of plant matter in lagoons, and subsequent infill as deep peat deposits, prior to arrival of Europeans. The wetlands sit on these deposits, and there are numerous interdune wetlands in the area, where peat is more shallow.

Land use is pastoral in the south (Mr Head's farm) and east (Whareroa Farm) with market gardens (Sang Sue Limited) in the southwest, and QE Park in the northwest. The northern and central area is DOC reserve.

We were given evidence that an unusually compact collection of interesting landforms and geological features exists adjacent to, and to the south of, MacKays Crossing. Many of these were visible from the present highway, the park and the railway line, and includes (Mr Edwards' evidence)

- The modified remains of a largely buried sea cliff (visible in the south)
- A steep localise alluvial fan from the Wainui Stream
- A large gently northwards sloping fan from the southern tributary of Te Ramaroa Stream
- A northwards increasing "step" in the main fan
- A conspicuous partly buried sea cliff alongside the State highway
- A westward sloping in-valley fan on the east side of MacKays Crossing
- A small delta-like fan at Memorial Gates

Mr Edwards made the interesting point that these features are culturally significant because of their association with Sir Charles Cotton, the famous New Zealand geomorphologist, who published sketches describing the features in the area, in 1918. He said; "*The real question to ask about landforms is not the often asked query as to whether they are 'outstanding,' or not but rather it is one of assessing their significance in terms of their scientific and educational value.*"

The Notice of Requirement described the relationship between alignment and landform as follows: "*the proposed alignment will substantially cut through the sea cliff, for a length of approximately 400-500m due to the proposed road as it meets and rises onto the land at the top of the cliff. However, a substantial part of the original landform will remain to the north and south of the cutting. The height of the cliff increases to the south of MacKays Crossing and decreases to the north approaching MacKays Crossing. The proposed cut through the cliff is located where its height is decreasing further north towards MacKays Crossing.*"

Landscape and landform were considered in the evaluation of options. 'Visual and Landscape' was one of four primary potential environmental effects, and we heard that there are significant physical constraints on the choice of route. As Mr Cheadle described, "*At the western side of the existing highway you have wetland and dune environment contained within a regional park, and buildings listed as historic in the KCDC Plan. Once you move further south and cross over the railway at MacKays*

Crossing to the east you have a noted geological feature and to the west the DoC Reserve, and railway line.”.

Mr Lister, for the applicant, said that the cutting into the sea cliff and the new inclined highway will be more prominent than the existing highway, although still quite distant from viewers at QE Park. The views will be intermittent because part of the highway will be hidden behind cutting. It was confirmed in the NOR that no significant areas of native vegetation will be removed in the construction of the cut; “*There is however, an impact where native vegetation existing on the sea cliff escarpment will be cleared for the cut through the geological feature. This will disrupt the wildlife corridor effect of the band of native vegetation on the escarpment. Replacement planting would to a certain extend mitigate this effect, but the flow of traffic through the cut would lessen the positive impacts of planting.*”

Mr Lister said Transit’s intention and his recommendation was to re-establish native shrub species on the cut cliff area, similar to that on the existing cliff. The Landscape Mitigation Plan (Appendix 2) displays the layout of nominated species of native trees and shrubs, and of grass. Evidence from Mr Edwards however, was that too much tree planting would tend to mask this significant geological feature. He said that the application of vegetation as a mitigation measure “*can be very inappropriate when it comes to retaining some of the intrinsic value of landforms,*” and “*frequently diminishes the visual appreciation of landforms and their value as an educational feature,*” and suggested that it would be appropriate for the Geological Society of New Zealand be consulted at the time the landscaping was designed to ensure that the result is not simply to camouflage significant land features.

In summary, it was made clear to us by witnesses from both sides that the area is a significant one for its geology and geomorphology, and because of its association with a founding geologist (Sir Charles Cotton). In our view, the earthworks and route favoured represent a strong attempt to minimise effects on the landform, and have potential to improve road users’ perception of the features because of the higher elevation of the proposed route.

We recommend also that the opportunity should be taken to enhance the public’s awareness of the local geology and landform. This could be done by development of appropriate signage, such as interpretive boards located in QE Park.

Seismic Risk

The Ohariu Fault is located in proximity both to the existing rail crossing and the point where the overbridge is to be located. We heard evidence from both sides on considerations of seismic risk and the potential for fault movement to seriously affect the proposed overpass. We heard from Mr Edwards that fault movement is estimated to have a recurrence interval of 1500 to 5000 years with associated displacement of 3 to 5 metres. This would clearly have a severe impact on a structure, and probably on earthworks.

Transit acknowledged the significance of the fault, and both sides agreed that its trace was likely to be within a few tens of metres from the overpass location. Mr Wright, noted that it would not be possible to have an effective road network without crossing faults, given that there were many in New Zealand but it was important to determine the location of faults relative to proposed structures. He said that the Transit New

Zealand Bridge Manual specified the earthquake resistance and performance requirements to provide the appropriate levels of safety.

Mr Edwards said in evidence, that from his comparison of geological and topographic maps, he concluded that the designation route lies on, or very close to the trace of the fault for some 500 to 600 metres. There was, in his view, "*a high long-term risk that this proposed part of State Highway 1 will, if built, one day fail catastrophically with severe ground rupture of the road underpass, embankment and cutting plus likely substantial damage to the railway underpass.*"...He said that the presence of groundwater increases the risk of occurrence of landslides and this means that the fault may prove to be even more problematic.

We note that the geotechnical report of Tonkin and Taylor (Appendix F to Mr Cheadle's evidence) points to the presence of potentially liquifiable (loose and very loose) sands in boreholes near the overpass structure. These boreholes are less than 10 metres deep, and Mr Edwards was of the view that deeper investigations were needed during any development of the project design. We agree.

In summary, we note that all submitting parties acknowledged the presence of an active fault in proximity to the overbridge works. We consider, because it is not possible to move the structure away from the likely line of the fault, and this does not appear to be known for certain, that there must be further investigation of ground conditions.

It is not known of course when the next significant seismic movement may take place. The range of values describing risk emerging from calculations are not helpful in this regard, but we consider we must accept that there is a significant level of risk. We are of a view that Transit New Zealand should undertake further investigation to better understand the nature and depth of materials and fault location in the vicinity of the structures proposed, and adjust location and form of design to minimise long term seismic effects. The presence of groundwater would normally be taken into account as part of the of cut and fill slopes, but in this case this may be further complicated by the fault, and should also be further investigated. The need for further investigation was not contested by the Applicant, as the design is at a preliminary stage.

Queen Elizabeth Park

Evidence from the applicant was that the route chosen substantially reduces the impact on QE Park compared to what would result from development of the "Sandhills Route" which runs to the west of the railway line. There will be loss of wetland environment whichever route is followed but especially insofar as QE Park is concerned, the present proposal will have a lesser impact, and the proposed mitigation works as discussed above will enhance existing wetland areas in the Park.

The principal impact resulting from the now proposed route will be some loss of land along the frontage to existing SH1 to form the new access road to the Park. The memorial gates (erected in 1962 to commemorate the encampment of the United States Marine Corps in the MacKays Crossing area during World War II) will remain as an architectural feature at the entrance to the Park and access is to be maintained within the Park to the Tramway Museum's front entrance.

The historic barn and a stand of mature trees located along the frontage of the Park, will be isolated by the new northern entrance and it is proposed that the barn is moved

to another part of the entrance area. The barn is recorded as a heritage feature in the KCDC's District Plan and Mr Ian Bowman, an Architectural Conservator, was commissioned to prepare a report on its heritage value and conservation potential. We were told that the results of the research were inconclusive and the date of the building remains uncertain, but the study determined that the barn warrants relocation to a similar site within QE Park rather than demolition.

However Ms Robinson, who leases the barn as commercial riding stables, was unconvinced of the necessity to relocate the barn. Her concerns related to the potential loss of heritage value due to the severance of the barn from its original site and that her business, which relies on the visibility of the barn from SH1 to attract customers, is likely to lose custom if the barn is moved. Mr Wright, for Transit said that several options to avoid relocation of the barn were considered. One option was to move the road to the east by approximately 30 metres to leave the barn physically unaffected, but this was dismissed as impractical because it would result in the road running above and parallel with the railway. A second option required the construction of a retaining wall around the barn and trees, and the relocation of the road to the west by 20 meters leaving the barn between the embankment and the slip road, which would leave the barn and trees isolated and enclosed by a retaining wall. It would also involve land beyond the area of the designation.

We agree with Transit's view that it is simply not practicable to preserve the barn in situ. This would mean the severance of the barn from the natural surroundings of the Park and would reduce its accessibility. Notwithstanding the possibility that relocating the barn may to some extent diminish its heritage value, it will create new opportunities to preserve and enhance the barn into the future. It will also provide safer access to the barn.

Transit proposes to undertake substantial new tree planting to mitigate the loss of mature trees at the eastern edge of QE Park, including the old macracarpa trees which presently surround the barn. Mr Lister advised that the planting has been designed to replace the current relatively dense planting with planting that has more depth and also is more permeable, in that it retains some view shafts from SH1 into the park.

Ms Sanders from the WRC advised that a grove of young macrocarpa trees near the proposed relocation site for the barn could be pruned to encourage, ultimately the same high canopy as at present. Mr Jackson, also from the WRC, said that the trees could be pruned to provide shelter for the barn. We are concerned that the loss of mature trees will mean a loss of shelter in the shorter term, especially for the tourist facilities but we accept that the result of the planting proposed, and the further development of QE Park will be positive in the long term. Most of the replacement planting discussed will be outside the designation boundaries, and its implementation is a matter to be included in the Heads of Agreement, which is subject to a designation condition.

The project will have the beneficial effect of creating a safer entrance and exit to QE Park because traffic entering the park will be separated from through traffic which will bypass the park via the overbridge. Mr Wright noted in his evidence that improved access to the park will also enhance opportunities for educational and recreational use and that "*the net impact of the project and mitigation measures would be a significant enhancement of the area*". We agree, and this also presents

opportunity to provide the appropriate signage with information about unique land forms, heritage features and the ongoing enhancement of the wetlands.

Mr Jefferies, submitting on behalf of the KCDC asked that the creation of a railway crossing to access QE Park should be avoided from a traffic safety perspective. We agree that a level crossing is undesirable, however we were told by Mr Wright that options to eliminate a level crossing were investigated but could not be justified on cost and environmental grounds. It is anticipated that traffic volumes using the access road will be small, approximately 400 vehicles per day, and that approach speeds will be low thus significantly alleviating traffic safety issues in this area.

In summary, while some encroachment into QE Park will be unavoidable as a result of the proposed alignment, we are satisfied that any adverse effects can be adequately mitigated by the measures proposed by Transit and by the relevant consent and designation conditions. We note that the proposed works are not inconsistent with the QE Park Management Plan which sets out the basis of the Park's management and aims "*To provide for the sustainable management and development of Queen Elizabeth Park for outdoor recreational use while preserving its natural, historical and cultural values.*"

Landscaping of the proposed highway will be undertaken and a replacement area of tree planting within the boundaries of the park will be created. The barn will be re-sited within the park close to the existing disused sports pavilion, and provision will be made for a reformed internal access to the barn. Moreover, beneficial effects will result from the project including the provision of safer access to the Park and the creation of a diverse wetland habitat within the Park to mitigate the loss of wetland in the DOC Reserve resulting from the Stage 2 works.

Cultural Effects

Given the special status accorded to Maori interests under the RMA, Transit has undertaken consultation with local iwi as a separate component of the project. Mr Farrell, of Ngati Haumia descent, was appointed by Transit to facilitate consultation with the Tangata whenua which involved three iwi, namely Te Atiawa ki Whakarongotai, Ngati Toa Rangatira and Ngati Haumia. In evidence Mr Farrell advised that several hui were held at which concerns were raised in relation to the detrimental effects of the proposed alignment on waahi tapu sites. Other issues identified by the Tangata whenua arose from the potential impacts of the project on Treaty of Waitangi claims to the area, but these fall outside the consideration of the RMA process.

Susan Forbes from Kotuku Consultants Ltd was commissioned to prepare a report on the potential effects of the six options considered in relation to historic and archaeological values. This report confirmed that the area has a long history of Maori occupation and that sites of cultural and archaeological significance are likely to exist throughout the project area and noted that "*The coastal Pa of Wainui, Tipapa, and Whareroa had cultivations and hunting areas through what is now QEP, SH1 and the foothills to the east of the highway.*" The report also identified that the proposed alignment will traverse a number of archaeological sites on Whareroa Farm, including Camp MacKay and the area cultivated as Te Ramaroa. The proposed alignment also passes through Mr Head's property where archaeological sites are likely to exist.

The results of the consultation and studies undertaken indicate that there is a strong possibility of disturbing waahi tapu sites, including burials and artefacts of cultural significance, in the vicinity of the proposed alignment. An Iwi Protocol (entitled “*Cultural Heritage Protocol and Procedures*”) is being developed between the Tangata whenua and Transit to address cultural issues should any sites or material of cultural significance be discovered during construction. This protocol will be included as a general condition to apply for all consents. Additionally, given the high probability that archaeological sites will be disturbed during construction, Transit has undertaken to obtain an archaeological authority from the Historic Places Trust to ‘modify, damage or destroy’ any sites encountered within the vicinity of the works.

In summary, we are satisfied that local iwi have been adequately consulted throughout the development of the project and that the measures proposed through the Iwi Protocol and the archaeological authority to be sought from the Historic Places Trust are sufficient to safeguard the traditional relationship of Maori with the area.

MacKays Cemetery

The MacKays family cemetery, located immediately south of MacKays Crossing, is administered by KCDC as a local purpose reserve. Part of the reserve is required for the works however the cemetery itself is not affected. A revised access will be provided to the cemetery and there is the potential to increase the size of the reserve by the addition of an area of land severed from Whareroa Farm. These issues are the subject of continuing discussion between the relevant parties.

In speaking to the KCDC submission, Mr Jefferies was concerned to ensure that the character of the reserve is preserved and that appropriate fencing and screen planting is undertaken. We agree, and have included a condition in the NOR to this effect. He also highlighted the possibility that burials may be located within the wider area of the reserve and requested that an appropriate protocol be developed between the KCDC and Transit in the event that human or archaeological remains are discovered during construction. Transit has agreed to develop a similar protocol with the KCDC to that being developed with local iwi and this is also included as a condition.

Therefore, while the proposed works will impinge to some extent on the reserve we are satisfied that the cemetery will not be disturbed and that any adverse effects arising from the discovery of burials or archaeological material within the vicinity of the reserve can be appropriately mitigated through the protocol to be established between Transit and KCDC.

Provision for Cyclists

Transit does not propose to include specific cycle ways as part of the improvements. The KCDC Officer’s report noted the lack of pedestrian and cycle access as limiting recreational activities. She also said this was a safety issue raised by submitters, and recommended that it would be appropriate to include provision for cyclists along the new part of the highway. She recommended a condition to the NOR to this effect.

For Transit, Mr Wright told us that there is no existing cycle way on the highway, and the perceived demand is low. He advised that KCDC is developing a pedestrian/cycle route through the district, extending along the coast from the southern end of QE Park, well away from the highway.

Mr Jeffries, for KCDC, said that he was concerned at the lack of provision for a cycle way. He confirmed that a cycle/pedestrian route was formed through the park. Mr Jackson from the WRC advised us of current plans to link access through QE Park and Whareroa Farm into the Akatarawa block. However this route is primarily for recreational use and is not suitable for other uses such as racing, speed training or general access.

Mr Wright advised that Transit is proposing to provide 2.5 metre wide sealed shoulders on the outside of the white edge line of the proposed highway and 1.5 metre shoulders on the proposed slip lanes, which provide an access to QE Park. This should provide satisfactory cycle access along SH1 and to QE Park. While the width of the shoulders on the slip lanes would be reduced by approximately 1 metre, it is anticipated that the traffic volumes and traffic speed along those roads would be far lower than those on the new highway.

Transit also submitted that in any case it would be unable to provide a dedicated cycleway because of ineligibility under Transfund's current policy, which restricts funding for cycleway construction to territorial authorities only.

In summary, while Transit does not propose to make specific provision for cyclists within the project area, we are satisfied that the needs of cyclists will be sufficiently catered for in the design of the proposed works, in particular in the provision of additional shoulder room along the edge of the new highway. Safety and access to the park will be provided by the inclusion of shoulders on the slip lanes accessing QEP. However this is part of the general design of the highway works and we do not think it is appropriate to make cycle ways subject to a condition of the NOR.

Effects on Properties

The new highway alignment will have a major impact on Whareroa Farm, a substantial landholding located to the east of SH1, and owned by Landcorp. The proposed works will affect the central operation and layout of the farm, requiring the relocation of two farmhouses, stockyards, woolshed and ancillary farm buildings, as well as the reorganisation of the farm entrance and internal circulation. However Landcorp has not made a submission and we understand agreement has been reached in terms of the mitigation measures proposed by Transit to address the effects of the proposal. We were advised that further resource consents may be required when details of works in this area are further developed.

Other than the effects on QE Park and Whareroa Farm, noted above, the Stage 1 works affect only one other property owner, Sang Sue Ltd, where the easing of the corner at the end of the southern straight will encroach on the adjacent market garden and require the removal of sections of the existing shelterbelt. This involves the loss of approximately 1 Ha of productive cropping land. The proposed mitigation is to replant the shelterbelt around the inside of the bend. Sang Sue Ltd made a submission but did not appear at the hearing, indicating agreement with the Transit proposal.

Stage 2 of the proposal will further affect Sang Sue Ltd, also the adjoining landowners to the north and south, being Mr Head and Mr Perkins respectively. The new embankment will cross all three properties, requiring land and creating severances in each case. We understand that most issues relating to effects on access and existing landuse have been satisfactorily resolved. However, Mr Head submitted that his

property is susceptible to flooding due to existing drainage problems resulting from a lack of maintenance of the drains to the west of the railway lines and sought assurances from Transit that the proposed works would not exacerbate this problem, especially by the creation of new wetlands west of the railway.

Mr Cheadle advised that Transit has undertaken to implement measures to reduce the possibility of repeated flooding to Mr Head's property. Such measures may include raising the level of Mr Head's land using fill material from the project, or such other works as agreed with Mr Head, and subject to Transit obtaining the necessary resource consents. Such works are intended to tie in with implementation of Stage 1 of the proposed road improvements. Given the problem of existing flooding, we do not consider it is possible for us to ask Transit to undertake further mitigation.

Stage 2 works will cut off the northwestern corner of the Sang Sue nurseries, and will traverse the eastern part of Mr Perkins property. However, the proposed new alignment is very much less in its effect than the existing designations on Mr Perkins' land. In his submission Mr Perkins pointed out that Transit has had a designation over parts of his property for more than 50 years, which has led to constant uncertainty and a loss of financial opportunity. He sought the immediate removal of the designation over his land no longer required for roading purposes. Transit has noted in the NOR that it will uplift the existing designations once the proposed alignment has been confirmed.

In summary, there are relatively few properties affected by the proposed alignment and most will be able to continue their existing landuse activities. While some properties will be affected directly by a loss of land and issues have been raised over the removal of current wind belt protection, dust, noise and difficulties with access, we are satisfied that the consultation to date and mitigation proposed by the applicant has resolved the main concerns of affected landowners. It is likely further consents will be required when details of the works are defined in some areas. From the data available, these would not present problems but further comment is beyond the scope of this report.

Visual Effects

Any adverse visual effects resulting from the proposed works are not anticipated to be more than minor. The proposed alignment will extend up onto the terrace and over the overbridge so that the new road will be generally more conspicuous than the present SH1. A result of this location also is that a much improved panorama is anticipated for travellers viewing from the road.

It is not anticipated that the new road will be intrusive from existing residences. The present highway is mostly hidden from Whareroa farm below the escarpment, whereas the realigned highway will cut through the relic cliff and climb onto the terrace by way of a large cutting. Mr Lister advised us however that the impact would be moderated by distance and the fact that the house enjoys panoramic views over the coastal plain to the coast. Also the effect will be mitigated by strategic planting to partially screen views of the cutting and road while retaining wider panoramas.

The house on the Sang Sue property is roughly the same distance from the proposed new highway than it is from the existing highway, but the new route will be elevated on an embankment. There are existing shelter trees between the house and alignment

and Mr Lister suggested that appropriate screen planting could be carried out on the wide fill batters.

Similarly there will only be minor visual effects in respect of Mr Head's house. Mr Lister pointed out the new route will be some 200m away from intervening dune hillocks, compared to the existing situation where the highway is some 140m away from the house and where screening relies on vegetation rather than topography. Any changes in amenity for the house are therefore likely to be positive. The Perkins property is currently open pasture. There are no houses on the property affected by the alignment.

Street lighting, which is necessary for safety purposes will have no adverse effects on any nearby residents. There will be some visual effects from the streetlights viewed over a greater distance. However, any negative visual effects will be outweighed by the safety benefits.

In summary, we consider that any adverse visual effects arising from the proposed works will be minor, and can be satisfactorily ameliorated subject to the implementation of appropriate planting as proposed in the Landscape Mitigation Plan (Appendix 2), the implementation of which is included as a condition of consent.

Noise

Potential adverse effects resulting from the proposed works in relation to noise are not considered to be any more than minor. No evidence was called at the hearing and we were referred to the report on noise traffic impacts prepared by Mr Hunt, an acoustics expert.

Mr Hunt based his assessment on the procedures and guidelines contained in Transit's "*Guidelines for Management of Traffic Noise*". He concluded that for Stage 1 the noise effects would be no more than minor, although the realignment will result in a different distribution of traffic noise in the area: in particular, the Landcorp farmhouse will experience an increase as the alignment will pass 20 metres from the house. However, it is considered that Transit's noise guidelines can be met, provided mitigation measures are imposed where appropriate.

Noise arising from construction will also be controlled by, and will comply with noise levels as set out in the standard noise guidelines for construction, maintenance and demolition work. There will be noise generated especially from mechanical digging and earthmoving equipment. Use of this will be restricted to daylight hours, and will not be undertaken on Sundays and public holidays to ensure the rural amenity is maintained for surrounding neighbours and QE Park visitors.

In general terms, it is considered that noise will be a relatively minor effect. While noise generated from the traffic using the overbridge may impact on the adjacent community and local environment, noise levels are expected to remain within Guideline limits and are assessed as no more than minor.

LAPSE TIMES, DURATION PERIODS AND COVERAGE OF CONSENTS

Different submissions were made by the applicant and the WRC, through the officer's report as to the lapse and duration times which should be given to the resource consents. Lapse times allow for a consent to be taken up, that is for work to be started. Notwithstanding that Transit, in evidence, indicated its intention to carry out the Stage 1 works within the short term, it asked in submission for a lapse period of 10 years. The WRC recommended 5 years as sufficient. We agree with this shorter period for the lapse of the consents. In the event that Transit is unable to begin the project as anticipated, a number of circumstances may have changed and we consider that it would be appropriate for new applications to be made.

Transit submitted further, with regard to the duration for which consent was granted, that the water permit, and the land use consents for works in the bed of rivers or streams should be granted for the maximum period permitted by the Act, of 35 years. Permanent works associated with the diversion of the Whareroa Stream and the overbridge earthworks, are a part of these consents and we agree that these consents should be granted for the period of 35 years, as requested. The land use consent for construction earthworks (21044), required under Section 9 of the Act, is not constrained as to duration and it is not appropriate to impose a time limit for these works.

The situation with regard to duration times for the discharge permits is more complex. The WRC position is that permits to discharged contaminants – to the Whareroa Stream, the wetland and generally to land - is for construction activity and should be limited to a period which sensibly allows for this, and that such discharges will cease once the works are completed and the highway operational. The time recommended is 7 years. Transit, however, requested the full allowance, 35 years for these permits also.

The longer term was to cover the ongoing discharge associated with the 'permanent' stormwater pond, also Transit raised the question of discharges from culverts and the highway itself, once it is operational. The WRC report was to the effect that discharges from a highway, once operational, are permitted under the rules of the WRFP, hence no consent is required, and this also applies to (permanent) discharges associated with the stormwater pond. The position of discharges from a culvert was discussed by Ms Wilks, again to the effect that a consent is not required, certainly from an existing culvert, and not where there was consent to divert water through a culvert, although we understood her to accept some doubt over the situation during the construction period.

We have sympathy with the Transit position, which we understand to be that it would prefer to have too many, rather than not enough, consents. However we support the WRC concept, that the discharge permits are primarily related to construction activity. The conditions imposed by them are designed to control associated effects and prevent adverse impacts on the receiving environments. We have therefore limited the duration times for all (three) discharge permits to 7 years as recommended by WRC.

However we have granted the permits in the terms requested by Transit, including for discharges in and out of the 'permanent' pond. This will ensure that no question of

the need or not for such consent, on an ongoing basis can arise until after the 7 year period, regardless of when the pond is completed, and will allow time for this matter to be determined.

Similarly we have granted the consents for discharges from (all) culverts, notwithstanding the argument put to us that such consent was not required. Again we consider that the 7 years term provides enough time for further consideration of the questions raised by Transit, and the need or not for specific consents for operational discharges of any kind to be determined, and if this is the case, for appropriate application(s) to be made.

There was also a difference between the applicant and the WRC officer as to the need for the land use consent for works in the beds of rivers and streams (21042) to include works associated with the embankment and overbridge. WRC position was that these works would be outside of the limits of the stream bed and consent was not required. However we accept Transit's submission that this work may come within the limits of the Whareroa Stream and have kept this clause in the consent. The water permit (21706) was extended by agreement during the hearing to provide for the diversion of water to temporary ponds, as specified in the sediment control plans, and we have retained the reference in this permit for the damming and diverting of water for the 'permanent' pond.

Other changes have been made in drawing up of the resource consents to rationalise the format somewhat, but these do not make any substantive changes to the conditions as agreed between the applicant and representatives of the WRC during the hearing, which we have endorsed.

RECOMMENDATION AND DECISION

The Commissioners have given consideration to the requests for the NOR made to the KCDC, and for six resource consents from the WRC, set out in this report, and considered fully above.

We consider that the project meets the criteria for a NOR set out in section 171 of the Act. We consider that the applicant has established the necessity for the NOR to undertake the work proposed, has adequately examined alternative proposals and has recognised plans and policies relevant to the work.

We have considered that the applications for consent to carry out the works required to achieve Stage 1 of the project in terms of section 104 of the Act, in particular with relation to regional plan objectives and policies which establish a framework to consider the effects on the environment, and the measures proposed to mitigate these where they will be adverse.

Obviously in a project of this nature there will be impacts on the environment. In this case, the new cutting traverses a recognised geological feature, a sea cliff, and in the construction of a new and improved entrance to QE Park, a historic barn/stable will be moved and old trees removed. It is not possible to totally avoid such effects and we do not think it would be appropriate to try to. We consider the measure proposed to mitigate adverse effects which will arise from the works to be satisfactory.

With regard to the non-complying aspects of the water permit (21706) and the land use consent (21042) related to the 'permanent' stormwater pond we accept with the

evidence that the pond which will be modified toward the end of Stage 1 works to incorporate a hydrocarbon interceptor, will be in character with the surrounding wetland. It is 'wetland friendly' and sustainable in terms of Part II of the Act.

We have discussed matters that arise under Part II of the Act and find the project is in accord with the overriding purpose of the Act, the sustainable management of resources.

Accordingly we:

recommend to Transit New Zealand that the requirement of a designation, as set out in the report, and as described in the application documents, be confirmed subject to the conditions included in attached Schedule 1, and

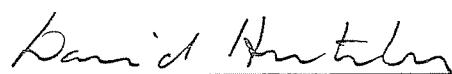
resolve to grant consent to the applications by Transit New Zealand, as set out in this report, and as described in the application documents, subject to the conditions included in attached Schedules 2 to 8.

SIGNED:

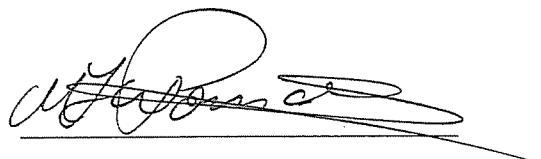


Helen Tobin

Chairperson



David Hutchison



Miria Pomare

DATED at Paraparaumu this Thirteenth day of February 2002.

Appendix 1

RECORD OF APPEARANCES

Representing the Applicant

Clare Sinnott	Legal Counsel for Transit New Zealand
Catherine Worsley	Regional Projects Manager, Transit New Zealand
Barry Wright	Civil Engineer, Montgomery Watson Harza
Karl Farrell (Ngati Haumia)	Iwi co-ordinator
Howard Cheadle	Town Planner, Montgomery Watson Harza
Gavin Lister	Landscape Architect, Isthmus Group
Martin Robertson	Earth Scientist, Montgomery Watson Harza
David Cameron	Water Resources Scientist, Montgomery Watson Harza
Evidence from Ian Bowman, Architectural Conservator and Architect, was presented by affidavit.	

Representing the Kapiti Coast District Council

Tineke Kolff and Andrew Guerin

Representing the Wellington Regional Council

Sarah Wilks and Rob Robson

Submitters

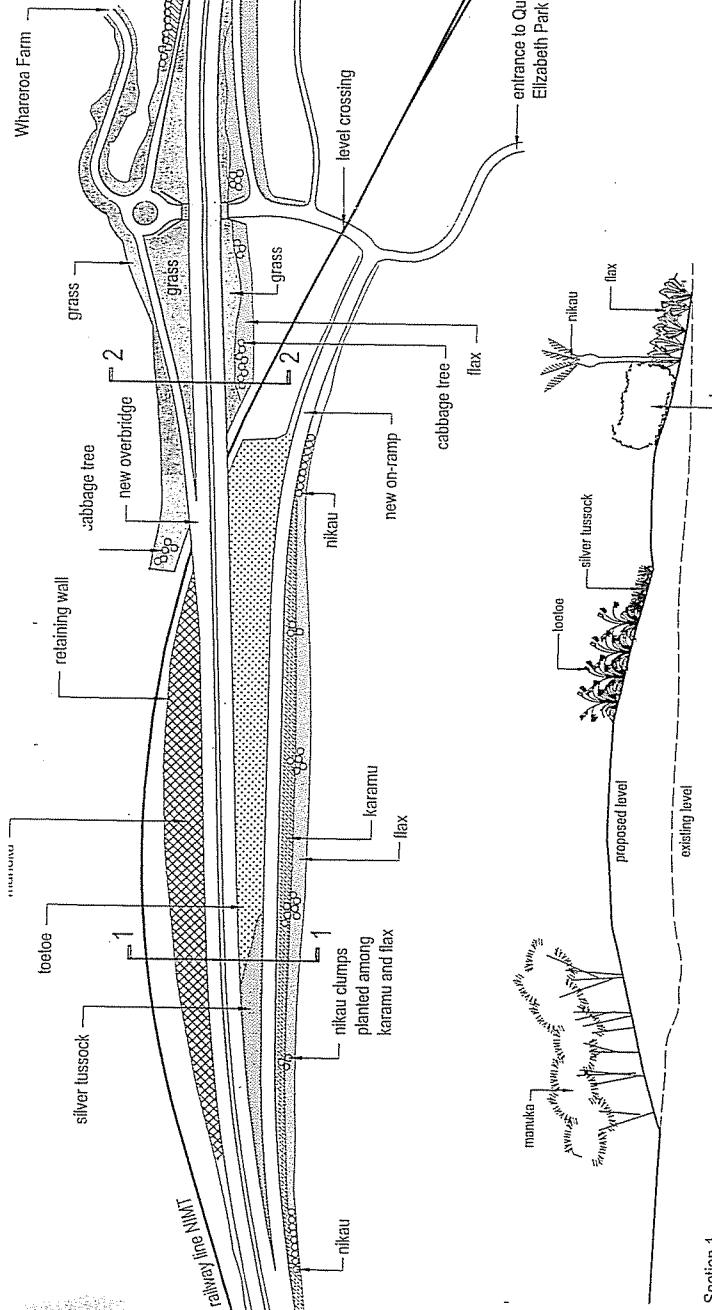
Sian Smith	Legal Counsel for NZ Fire Service
Wayne Sarjeant	Chief Fire Officer, Paraparaumu Fire District
Maree Sanders & Ross Jackson	Wellington Regional Council
Mandy Robinson	Stables on the Park
Dick Jessup	Coastal Highway Group
Chris Horne	Individual submission
Kevin Jefferies	Kapiti Coast District Council
Sarah Bagnall	Department of Conservation
Allan Head	Affected landowner, individual submission
Tony Edwards	Retired geologist, individual submission
John Perkins	Affected landowner, individual submission
Chris Glover	Local resident, individual submission
Historic Places Trust	(Information was read)
Wellington Tramway Museum Inc	(Information was read)

Appendix 2

LANDSCAPE MITIGATION PLAN

isthmus

GROUP
Level 2 AMP Chamber
187 Featherston Street
PO Box 24 111
Wellington
Tel +64 4 499 0832
Fax +64 4 499 0831
email wgn@isthmus.co.nz



Section 3
not to scale

Section 4
not to scale

Design approach

The planting design aims to:

- keep views from the road open to the dune lands and the sea
- visually define the road corridor
- draw attention to the different elevations and views along the road through changes in planting

Area from north to south	Planting	Notes
Connection to Rauanui	Continue selected species from Opus plan; mass planting to create strong, undulated and dramatic edge; flax and kānau with nikau interplanted	
Straights		
Edge between railway line and Highway	Plant in one species (manuka) to create 'forest'; screen and form rail and vice versa and create strong visual edge to road	
Edge to Queen Elizabeth Park	Planting along boundary with park is indicative; plant species and layout to be confirmed with Wellington Regional Council	
Whareora Farm	Plant native trees to screen existing house from view of road	
Larger cutting through terrace	Plant high banks with mix of pioneer, hardy native species. Plant lower edges in mix of grasses to continue them from northern end of bridge	
DOC reserve land	Final planting plan and species to be confirmed by DOC	

LANDSCAPE MITIGATION PLAN

SH1 REALIGNMENT

MACKAY'S CROSSING

Isthmus

Ways

Do not dimension from this drawing

Check at measurement on site

This drawing is copyright of Isthmus Group Ltd

Date

NOVEMBER 2001

Scale

1:2500 @ A1

1:5000 @ A3

Revision

0 100

SCHEDULE 1

KAPITI COAST DISTRICT COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT
CONDITIONS FOR NOTICE OF REQUIREMENT DESIGNATION

An application for a Notice of requirement for:

A project or work to construct, operation, maintain and repair road forming part of State Highway One and the carrying out of ancillary works and activities (the notation for which is “State highways Purposes”).

Lapsing of Designation

1. Pursuant to section 184(1)(c) of the Resource Management Act 1991, the lapsing period of this designation (stages one and two) is fifteen years.

Construction – Access and Traffic

2. Continuous access to QE Park in the vicinity of MacKays Crossing shall be provided during the construction of the project.
3. The Requiring Authority shall establish Traffic Management Plans at the varying stages throughout the construction of the project progress to demonstrate how traffic will be managed during the construction phase of the project in accordance with the Transit New Zealand Code of Practice for Temporary Traffic Management.

Construction – Location of Ohariu Fault

4. The Requiring Authority shall obtain and examine the best information to estimate the location of the Ohariu Fault in the vicinity of structures, and the nature of overburden. The results of this study shall be incorporated into the designs, which shall accord with all applicable standards, including the Transit New Zealand Bridge Manual, where appropriate.
5. The design of the embankments and cutting that are to be undertaken as part of the works shall be designed with due recognition to their proximity to the Ohariu fault, and with allowance for the risk of associated seismic events .

Construction – Liaison

6. Prior to the commencement of each stage of the construction works, the Requiring Authority shall use its best endeavour to notify affected owners and occupiers of all properties adjoining the new road of:
 - (a) The details of the construction programme;
 - (b) A single point of contact for concerns or enquiries relating to the project, including a telephone and facsimile number.

Construction – Environment

7. Prior to the commencement of the construction works, the Requiring Authority shall prepare an Environment Site Management Plan (ESMP) for the construction of the works in accordance with consultation undertaken with the Wellington Regional Council (WRC), the Department of Conservation (DOC), tangata

whenua and the Kapiti Coast District Council, demonstrating how the Requiring Authority will mitigate any adverse effects of the works on the environment during the construction phase. The ESMP shall include:

- The name, telephone number and address of the site manager
- Measures to be used to maintain the site in a tidy condition including the storage of building materials and location of workers conveniences
- A plan specifying the location of ingress and egress during earthworks and construction on the site
- The proposed numbers and timings of truck movements throughout the day
- Other methods and measures to ensure that adverse effects on the environment are mitigated through “best practice” throughout all construction processes.

The Requiring Authority shall monitor its contractors’ compliance with the ESMP.

Landscaping

8. Prior to any works starting on site, the Requiring Authority shall develop detailed revegetation plans and specifications demonstrating how the Requiring Authority will implement revegetation in general accordance with the Landscape Mitigation Plan “*SH 1 Realignment MacKays Crossing*” Job number W402 dated November 2001 and submitted by Gavin Lister (Appendix 2). These plans and specifications shall be subject to final design and any modifications required to comply with any other conditions of this designation. The landscaping shall include planting the cut batters of the sea cliff in native vegetation, but such planting shall not obscure the natural landform of the sea cliff. The plans and specifications shall be to the written approval of the Resource Consents Manager, following consultation with the WRC, the Department of Conservation and the New Zealand Geological Society’s Geological Reserves Committee, or a suitable person appointed by that committee.
9. Shaping and cutting fill batters shall be designed and constructed in such a way as to resemble as far as possible the existing natural landforms of the area. Earthworks shall be designed to integrate into the surrounding landscape, e.g. rounding edges of cut faces where practicable.

Traffic Noise

10. The proposed works shall be designed so that noise levels comply with the Transit document entitled “*Transit New Zealand Guidelines for the Management of Road Traffic Noise – State Highway Improvement*” contained in the Transit New Zealand Policy Planning Manual, dated December 1999 (the “Noise Guidelines”). Mitigation measures proposed in the report “*State Highway Designation: MacKays Crossing Traffic Noise Assessment*” prepared by Malcolm Hunt Associates for the purposes of this Notice of Requirement shall be undertaken where necessary to ensure that the Transit New Zealand Guidelines are met.

Protocols for Dealing with Koiwi or Taonga and Human Remains or Artifacts

11. Prior to any works starting on site, and in consultation with Ngati Toa Rangatira, Ngati Haumia and Te Ati Awa Ki Whakarongotai, the Requiring Authority shall develop a document entitled “*Cultural Heritage Protocol and Procedures*”

detailling the procedure that will be adopted in the event that koiwi or taonga are unearthed during the course of the construction of the project.

12. Prior to any works starting in the vicinity of the MacKays Cemetery Reserve, and in consultation with the Resource Consents Manager, the Requiring Authority shall develop a document entitled "*MacKays Cemetery Protocol and Procedures*" detailing the procedure that will be adopted in the event that human remains or artifacts are unearthed in the vicinity of that Reserve during the course of the construction of the project.

MacKays Cemetery

13. The design and construction of the works shall include, as far as practical, appropriate screen planting and fencing to protect the character of the Local Purpose Reserve (MacKays Cemetery) to the satisfaction of the Resource Consents Manager.

Heads of Agreement

14. A draft Heads of Agreement shall be formulated by Transit New Zealand and will include:
 - Wetland mitigation measures that result in no net loss of wetland
 - The encouragement of habitat diversity
 - The relocation of the historic barn located at the entrance to the park, to another site within QE Park
 - Replanting of trees within QE Park to replace those, especially in proximity to the historic barn, removed to allow for construction of the north bound slip road adjoining QE Park
 - Ongoing responsibility for maintenance works
 - Provision of a dispute resolution
 - Provision for a public information display with appropriate signage, such as interpretative boards in a suitable position, describing ecological features and interpretation of geological features in the area

The document shall be agreed with and signed by authorised representatives of

- Department of Conservation
- Wellington Regional Council
- Kapiti Coast District Council
- Transit New Zealand

Advice Notes

The Requiring Authority should consult with the New Zealand Historic Places Trust with regard to whether it needs to obtain any authorities under the Historic Places Act in order to carry out the proposed project.

The Requiring Authority should consult with the Resource Consents Managers of KCDC and WRC to ascertain what additional resource consent applications, if any, may be necessary in order to construct and/or operate the project.

The Requiring Authority should consult with the Building Manager of KCDC to ascertain what activities associated with this project require a building consent.

SCHEDULE 2:

WELLINGTON REGIONAL COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT
GENERAL CONDITIONS FOR ALL CONSENTS

1. This consent shall lapse five years after the date of commencement of the consent, unless the consent is either given effect to before that lapsing date, or unless the Wellington Regional Council acting under section 125 Resource Management Act 1991 fixes a longer period.
2. The location, design, construction and implementation of the works shall be as described in the consent application dated 19 July 2001 including the supporting information entitled Appendix A: *Reports for Notice of Requirement*, Appendix B: *Photographs*, Appendix C: *Reports for Assessment of Effects*, Appendix C: *(Supplementary) Additional Reports for assessment of Effects*, Appendix D: *Wetland Mitigation*, Appendix E: *(Final) Sediment Control Principles* (dated July 16 2001), Appendix F: *Geotechnical Report*, and Appendix G: *Baseline Monitoring*, and the section 92 response letter dated 21 July 2001, but subject to final design and any modifications required to comply with any of the conditions of consent.
3. The Manager shall be given a minimum 48 hours notice prior to the exercise of this consent. All references in this consent to that Council Officer shall be deemed to include reference to any other Council Officer who has assumed the relevant area of responsibility if the Chief Executive of the Council has given notice in writing to the consent holder of the change in allocation of responsibilities.
4. This consent is subject to the Wellington Regional Council or its servants, or its agents, being permitted access at all reasonable times for the purpose of carrying out inspections, measurements and the taking of samples.
5. The consent holder shall maintain a permanent record of any complaints received alleging adverse effects from or related to the exercise of the consents. The record shall include the name and address (as far as practicable) of the complainant; identification of the nature of the matter complained about; date and time of complaint and of the alleged event; weather conditions at the time of the complaint (as far as practicable). This record shall be made available to the Manager on request.
6. This consent is granted for the purpose of and is limited to activities in relation to the construction, operation, maintenance, realignment and repair of improvements to SH1 at MacKays Crossing, adjacent areas, and adjacent public roads, and for carrying out incidental works and activities.
7. The consent holder, in accordance with section 127 of the Resource Management Act 1991, may apply to the Wellington Regional Council for a change or cancellation of any condition of the resource consent at any time within six months of the first, and third, fifth, seventh, ninth, eleventh and thirteenth anniversaries of the date of commencement of the consent, except any condition

as to the duration of the consent, for the purposes of enabling the better implementation of the consent in accordance with Part II of the Act.

8. Prior to any works starting on site, and in consultation with Ngati Toa Rangatira, Ngati Haumia and Te Ati Awa Ki Whakarongotai, the consent holder shall develop a document entitled "*Cultural Heritage Protocol and Procedures*", detailing the procedures that will be adopted in the event that koiwi or taonga are unearthed during the course of construction of the project.

Interpretation

In these consents, unless the context otherwise requires:

‘EMP’, means the *Environmental Monitoring Plan – MacKays Crossing Improvement* required to be prepared and submitted in accordance with condition [34] of Discharge Permit [21707], condition [35] of Discharge Permit [21043], condition [31] of Discharge Permit [21708], condition [26] of Land Use Consent [21042] and condition [30] of Land Use consent [21044];

- (i) The EMP shall set out the monitoring to be undertaken in relation to the MacKays Crossing Improvements project and as appropriate to meet the requirements of each above consent, shall include the following:
 - Monitoring of macroinvertebrates in Whareroa Stream on at least one occasion in the late summer and within the second year of completion of construction activities. The sample sites shall include in-stream sites at or about the sample sites in *Appendix G – Baseline Monitoring*. A protocol for the macroinvertebrate sampling established by a suitably qualified and experienced freshwater biologist.
 - The procedures for reporting the results and interpretation of monitoring undertaken in relation to the MacKays Crossing Improvements project to the Manager.
- (ii) The EMP may include provision to enable non-significant departures from the EMP, to be authorised by the Manager.
- (iii) The EMP may specify obligations to be implemented prior to the commencement of the works.

‘ESCP’ means the *Erosion and Sediment Control Plan(s)* required to be prepared under condition 14 of Discharge Permit [21707], condition [14] of Discharge Permit [21043], condition [14] of Discharge Permit [21708] and condition [12] of Land Use consent [21044]

The ESCP shall (as a minimum) include the following:

- Contour information at suitable intervals;
- Erosion and sediment controls including specific pond designs and locations;
- Supporting calculations relating to the sizing of the sediment controls;
- Catchment boundaries for the sediment controls;
- Location of the works, notably cut and fill operations;

- Details of construction method to be employed, including estimates of the timing and duration of the works;
- A programme for managing exposed areas, including progressive stabilisation considerations;
- Monitoring and maintenance schedules for erosion and sediment controls;
- Identification of those measures that shall be implemented prior to the commencement of bulk earthworks; and
- All drawings to an appropriate scale.

‘ESMP’ means the *Environmental Site Management Plan* required to be prepared under condition [13] of Discharge Permit [21707], condition [13] of Discharge Permit [21043], condition [13] of Discharge Permit [21708] and condition [11] of Land Use consent [21044]

The ESMP shall include the following:

- Identification of experienced staff to manage the environmental issues onsite, and their emergency contact phone numbers;
- Identification of principal staff who have clearly defined roles and responsibilities to ensure the consent conditions, and the ESCP are adhered to throughout the contract;
- Provision of details of a chain of responsibility for managing environmental issues and details of responsible personnel;
- Details of all erosion and sediment control measures to be implemented;
- Maintenance programmes and operation schedules for all temporary stormwater treatment, and sediment control devices;
- Details of construction methods to be employed and how these will be used to minimise the amount of sediment that will be released;
- A programme for the education (with respect to the environment) of employees and subcontractors; and
- A maintenance programme for any haul roads.

For the purposes of this definition, “staff” shall be defined as management and employees of the engineering consultancy and the principal contractors.

‘Hazardous Substance’ means, unless expressly provided otherwise by regulations, any substance;

(a) With one or more of the following intrinsic properties:

- (i) Explosiveness
- (ii) Flammability
- (iii) A capacity to oxidise
- (iv) Corrosiveness
- (v) Toxicity

(b) Ecotoxicity, with or without bioaccumulation; or

(c) Which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased)

generates a substance with any one or more of the properties specified in paragraph (a) of this definition.

'Manager' means the Manager, Consents Management, Wellington Regional Council'

'Stabilised' means in relation to any site or area inherently resistant to erosion or rendered resistant, such as by using indurated rock or by the application of basecourse, colluvium, grassing, mulch, or another method to the reasonable satisfaction of the Manager and as specified in TP90. Where seeding or grassing is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised in agreement with the Manager once an 80% vegetative ground cover has been established.

'TP90' means the Auckland Regional Council Technical Publication 90 *Erosion and sediment control guidelines for land disturbing activities in the Auckland Region*, March 1999.

SCHEDULE 2:

WELLINGTON REGIONAL COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT
GENERAL CONDITIONS FOR ALL CONSENTS

1. This consent shall lapse five years after the date of commencement of the consent, unless the consent is either given effect to before that lapsing date, or unless the Wellington Regional Council acting under section 125 Resource Management Act 1991 fixes a longer period.
2. The location, design, construction and implementation of the works shall be as described in the consent application dated 19 July 2001 including the supporting information entitled Appendix A: *Reports for Notice of Requirement*, Appendix B: *Photographs*, Appendix C: *Reports for Assessment of Effects*, Appendix C: *(Supplementary) Additional Reports for assessment of Effects*, Appendix D: *Wetland Mitigation*, Appendix E: *(Final) Sediment Control Principles* (dated July 16 2001), Appendix F: *Geotechnical Report*, and Appendix G: *Baseline Monitoring*, and the section 92 response letter dated 21 July 2001, but subject to final design and any modifications required to comply with any of the conditions of consent.
3. The Manager shall be given a minimum 48 hours notice prior to the exercise of this consent. All references in this consent to that Council Officer shall be deemed to include reference to any other Council Officer who has assumed the relevant area of responsibility if the Chief Executive of the Council has given notice in writing to the consent holder of the change in allocation of responsibilities.
4. This consent is subject to the Wellington Regional Council or its servants, or its agents, being permitted access at all reasonable times for the purpose of carrying out inspections, measurements and the taking of samples.
5. The consent holder shall maintain a permanent record of any complaints received alleging adverse effects from or related to the exercise of the consents. The record shall include the name and address (as far as practicable) of the complainant; identification of the nature of the matter complained about; date and time of complaint and of the alleged event; weather conditions at the time of the complaint (as far as practicable). This record shall be made available to the Manager on request.
6. This consent is granted for the purpose of and is limited to activities in relation to the construction, operation, maintenance, realignment and repair of improvements to SH1 at MacKays Crossing, adjacent areas, and adjacent public roads, and for carrying out incidental works and activities.
7. The consent holder, in accordance with section 127 of the Resource Management Act 1991, may apply to the Wellington Regional Council for a change or cancellation of any condition of the resource consent at any time within six months of the first, and third, fifth, seventh, ninth, eleventh and thirteenth anniversaries of the date of commencement of the consent, except any condition

as to the duration of the consent, for the purposes of enabling the better implementation of the consent in accordance with Part II of the Act.

8. Prior to any works starting on site, and in consultation with Ngati Toa Rangatira, Ngati Haumia and Te Ati Awa Ki Whakarongotai, the consent holder shall develop a document entitled "*Cultural Heritage Protocol and Procedures*", detailing the procedures that will be adopted in the event that koiwi or taonga are unearthed during the course of construction of the project.

Interpretation

In these consents, unless the context otherwise requires:

'EMP', means the *Environmental Monitoring Plan – MacKays Crossing Improvement* required to be prepared and submitted in accordance with condition [34] of Discharge Permit [21707], condition [35] of Discharge Permit [21043], condition [31] of Discharge Permit [21708], condition [26] of Land Use Consent [21042] and condition [30] of Land Use consent [21044];

- (i) The EMP shall set out the monitoring to be undertaken in relation to the MacKays Crossing Improvements project and as appropriate to meet the requirements of each above consent, shall include the following:
 - Monitoring of macroinvertebrates in Whareroa Stream on at least one occasion in the late summer and within the second year of completion of construction activities. The sample sites shall include in-stream sites at or about the sample sites in *Appendix G – Baseline Monitoring*. A protocol for the macroinvertebrate sampling established by a suitably qualified and experienced freshwater biologist.
 - The procedures for reporting the results and interpretation of monitoring undertaken in relation to the MacKays Crossing Improvements project to the Manager.
- (ii) The EMP may include provision to enable non-significant departures from the EMP, to be authorised by the Manager.
- (iii) The EMP may specify obligations to be implemented prior to the commencement of the works.

'ESCP' means the *Erosion and Sediment Control Plan(s)* required to be prepared under condition 14 of Discharge Permit [21707], condition [14] of Discharge Permit [21043], condition [14] of Discharge Permit [21708] and condition [12] of Land Use consent [21044]

The ESCP shall (as a minimum) include the following:

- Contour information at suitable intervals;
- Erosion and sediment controls including specific pond designs and locations;
- Supporting calculations relating to the sizing of the sediment controls;
- Catchment boundaries for the sediment controls;
- Location of the works, notably cut and fill operations;

- Details of construction method to be employed, including estimates of the timing and duration of the works;
- A programme for managing exposed areas, including progressive stabilisation considerations;
- Monitoring and maintenance schedules for erosion and sediment controls;
- Identification of those measures that shall be implemented prior to the commencement of bulk earthworks; and
- All drawings to an appropriate scale.

‘ESMP’ means the *Environmental Site Management Plan* required to be prepared under condition [13] of Discharge Permit [21707], condition [13] of Discharge Permit [21043], condition [13] of Discharge Permit [21708] and condition [11] of Land Use consent [21044]

The ESMP shall include the following:

- Identification of experienced staff to manage the environmental issues onsite, and their emergency contact phone numbers;
- Identification of principal staff who have clearly defined roles and responsibilities to ensure the consent conditions, and the ESCP are adhered to throughout the contract;
- Provision of details of a chain of responsibility for managing environmental issues and details of responsible personnel;
- Details of all erosion and sediment control measures to be implemented;
- Maintenance programmes and operation schedules for all temporary stormwater treatment, and sediment control devices;
- Details of construction methods to be employed and how these will be used to minimise the amount of sediment that will be released;
- A programme for the education (with respect to the environment) of employees and subcontractors; and
- A maintenance programme for any haul roads.

For the purposes of this definition, “staff” shall be defined as management and employees of the engineering consultancy and the principal contractors.

‘Hazardous Substance’ means, unless expressly provided otherwise by regulations, any substance;

(a) With one or more of the following intrinsic properties:

- (i) Explosiveness
- (ii) Flammability
- (iii) A capacity to oxidise
- (iv) Corrosiveness
- (v) Toxicity

(b) Ecotoxicity, with or without bioaccumulation; or

(c) Which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased)

generates a substance with any one or more of the properties specified in paragraph (a) of this definition.

'Manager' means the Manager, Consents Management, Wellington Regional Council'

'Stabilised' means in relation to any site or area inherently resistant to erosion or rendered resistant, such as by using indurated rock or by the application of basecourse, colluvium, grassing, mulch, or another method to the reasonable satisfaction of the Manager and as specified in TP90. Where seeding or grassing is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised in agreement with the Manager once an 80% vegetative ground cover has been established.

'TP90' means the Auckland Regional Council Technical Publication 90 *Erosion and sediment control guidelines for land disturbing activities in the Auckland Region*, March 1999.

SCHEDULE 3:

WELLINGTON REGIONAL COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT

WATER PERMIT WGN 010162 [21706]

A water permit to take, use, dam, and divert water, including surface water for construction, operation, maintenance and repair activities including:

- *Temporarily damming water and diverting water during road works, in stream works and other construction activities in the Whareroa Stream.*
- *Permanently damming and diverting water in the MacKays Wetland by the construction of a sediment pond as part of the sediment control measures to be undertaken during construction and to be retained as a permanent sediment control feature.*
- *The permanent diversion of sections of the Whareroa Stream through culverts under the new road (resulting in the permanent filling of existing stream bed).*
- *Taking of water from temporary sediment ponds for use during construction activities, primarily for dust suppression and washing vehicles.*
- *Diverting stormwater to temporary sediment control ponds as specified in the sediment control plan*

Duration of Consent

9. In terms of section 123(d) of the Resource Management Act 1991, the period for which this consent is granted is limited to 35 years from the date of commencement of this consent.

Commencement

10. This consent shall commence on the date that the designation for "State Highway Purposes" sought in the Notice of Requirement to Kapiti Coast District Council, dated 19 April 2001 is confirmed.

Works / Design Standard Conditions

11. All damming and diversions shall remain the responsibility of the consent holder and shall be maintained to the reasonable satisfaction of the Manager.
12. Prior to the commencement of the works, the consent holder shall provide the final design plans for the proposed diversion of Whareroa Stream to the Manager.
13. The consent holder shall provide a detailed construction methodology for the diversion works in Whareroa Stream, at least 15 working days prior to the activity commencing. The construction methodology shall be completed to the reasonable satisfaction of the Manager, prior to the activity commencing and it shall include information relating to:

- (a) Steps to be taken to avoid, remedy, or mitigate any discharge of contaminants to groundwater or surface water;
 - (b) Steps to ensure any increased turbidity in the waters of Whareroa Stream due to the works is minimised; and
 - (c) If not already specified in an ESCP prepared under any resource consent in respect of the MacKays Crossing improvement works, details of groundwater and stormwater that may require disposal, procedures for minimising potential contamination therein and also methods for disposal of those waters.
14. All materials used to construct the diversion of Whareroa Stream shall be inert and suitable for the site.
15. The consent holder shall not permit or allow any contaminant or material associated with the consent holder's activity to be released otherwise than in conformity with Discharge Permits WGN 010162 [21707], WGN 010162 [21043], WGN 010162 [21708]. In relation to any unforeseen discharge of a contaminant, the consent holder shall:
- (i) Take immediate steps to remedy and mitigate any adverse effects on the environment caused by any such unforeseen releases of contaminants. Such steps shall be to the reasonable satisfaction of the Manager;
 - (ii) Immediately notify the Manager of any such release of any contaminant or material;
 - (iii) If required by the Manager, as soon as practicable provide a written report to the Manager, detailing the nature, manner and cause of the release and the steps taken (and being taken if appropriate) to remedy and control the release and to prevent any further such release.
16. The consent holder shall arrange for a suitably qualified person to provide confirmation in writing that the diversion of Whareroa Stream has been constructed in accordance with the design plans/drawings submitted to the Wellington Regional Council and also in accordance with the conditions of the consent.
17. The permanent stormwater treatment pond to be constructed in the MacKays Crossing Wetland Reserve shall be designed and installed in accordance with section 2.1 "sediment retention pond" of TP90. Upon completion of Stage 1 of the MacKays Crossing SH1 realignment, the said pond shall, in consultation with DOC, be either removed, or reconstructed to form a stormwater pond with a hydrocarbon interceptor in general accordance with Figure 6 of Appendix D "Wetland Mitigation" dated April 2001.
- Erosion and Sediment Control**
18. All practicable steps shall be taken to minimise sediment loading and increased turbidity of Whareroa Stream (and its tributaries) due to the implementation and operation of the diversion works.

19. The consent holder shall ensure that any temporary dam structure built within the stream shall be constructed from non-erodible material such as sandbags.
20. The consent holder shall take all practicable steps to prevent run-off from raw cuts and fills in the Whareroa Stream diversion channel. Such steps shall be to the satisfaction of the Manager.

Fish passage

21. The diversion of Whareroa Stream shall be implemented and operated in a manner that will, to the reasonable satisfaction of the Manager, provide for fish passage for climbing species.
22. The consent holder shall ensure that the intakes of any pumps used to divert stream flow are screened to prevent fish being trapped on the intakes.
23. If any part of the Whareroa Stream is to be temporarily dammed, sufficient flow shall be maintained at all times below the site of the works so as not to adversely effect instream biota.
24. Works involved in the construction of the proposed diversion of Whareroa Stream which would impinge on the existing active channel of the stream shall not be undertaken between 1 October to 30 November inclusive.

SCHEDULE 4:

WELLINGTON REGIONAL COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT

DISCHARGE PERMIT WGN010162 [21707]

A discharge permit to discharge contaminants (including sediment and other local material) and water (which may contain contaminants) to water in the Whareroa Stream, for activities involved in the construction, operation and maintenance and repair including:

- *Discharges occurring during earthworks, road works, instream works and other construction activities*
- *Discharges of stormwater and other run off or drainage water*
- *Discharges into and out of temporary constructed sediment ponds*
- *Discharges from new culverts*

Duration of Consent

9. In terms of section 123(d) of the Resource Management Act 1991, the period for which this consent is granted is limited to 7 years from the date of commencement of this consent.

Commencement

10. This consent shall commence on the date that the designation for “State Highway Purposes” sought in the Notice of Requirement to Kapiti Coast District Council, dated 19 April 2001 is confirmed.

Works/ Design Standard Conditions

11. All fill material disposed of at any of the fills/earth embankments in connection with the proposed works at MacKays Crossing shall be restricted to cleanfill such as clay, soil, rock, and peat and all such fill material shall be placed and compacted so as to minimise erosion and instability.
12. Notwithstanding the requirements of Conditions [13 - 32], the consent holder shall at all times take all practicable steps for minimising erosion and minimising the suspended solids content of any discharge to water.

Erosion and Sediment Control

13. Except as provided by condition [35], prior to the commencement of works the consent holder shall prepare an ESMP and submit that ESMP to the Manager for written approval. This permit shall be exercised at all times in accordance with the ESMP.
14. Except as provided by condition [35], the Consent Holder shall, for the area of the Improvement Works to MacKays Crossing, prepare an ESCP or ESCP(s). These

plan(s) shall be prepared in accordance with the consent conditions, AEE and the ESMP.

This permit shall be exercised in accordance with the ESCP, provided that this obligation shall cease to apply in respect of any particular site or area of any site once that site or area is stabilised.

15. The ESCP(s) prepared under condition [14] shall be submitted to the Manager, and written approval from the Manager, who shall have regard to the consent conditions, the ESMP and the requirements of TP90 shall be obtained prior to earthworks commencing.
16. The consent holder shall ensure that all sediment-laden runoff from the site shall be treated by the sediment control measures approved under condition [15].
17. Except in emergencies, no amendments may be made to the ESCP(s) and implemented controls (approved under condition [15]), unless prior written approval from the Manager is obtained.
18. All erosion and sediment control measures shall be installed in accordance with TP90.
19. All sediment retention ponds shall be constructed to withstand the 1% Annual Exceedance Probability frequency storm event without failing (in part or in whole), and shall incorporate an emergency spillway to accommodate that event.
20. All sediment retention ponds shall incorporate a level spreader across the full width of the inlet end of the pond. The level spreader shall be 100-150 mm above the invert level of the spillway.
21. The consent holder shall ensure that this consent and these attached consent conditions, and ESCP(s) approved under condition [15] are forwarded to all earthworks contractors carrying out works under these consents.
22. Except as provided by condition [35], the consent holder shall submit a certificate signed by experienced staff, to certify that the erosion and sediment controls have been constructed in accordance with any ESCP(s) approved under condition [15] of this consent, following the construction of the controls and prior to the commencement of bulk earthworks. Certified controls shall include sediment retention ponds, and diversion channels/bunds. This requirement shall also apply to sediment retention facilities that are constructed during site development.

Information supplied with the certificate shall include:

- i) Contributing catchment area;
- ii) Retention volume of structure(s);
- iii) Shape of structure(s);
- iv) Position of inlets/outlets;
- v) Stabilisation of the structure
- vi) Confirmation of Compliance with condition [14]; and
- vii) Size of diversion(s) and method of stabilisation

23. A copy of the “as-built” erosion and sediment control plans shall be kept on site and shall be updated as soon as practicable following any changes being made.

24. No sediment retention ponds or perimeter controls as approved and implemented under condition [15] are to be removed unless the removal is approved by the Manager or the relevant site or area is stabilised.
25. During the exercise of this consent, all practicable steps shall be taken to minimise any discharge to Whareroa Stream that may result in any of the following effects on the receiving waters after reasonable mixing:
 - The production of any conspicuous oil or grease films, scums or foams or floatable or suspended material;
 - Any conspicuous change in colour or visual clarity;
 - Any emission of objectionable odour;
 - The rendering of fresh water unsuitable for consumption by humans and farm animals;
 - Any significant adverse effect on aquatic life; and
 - A change of more than 3° Celsius in the natural temperature of the water.
26. No hazardous substances shall be discharged to watercourses.
27. The consent holder shall take all reasonable steps to prevent any hazardous substance being discharged to land through the operation of machinery. If a material amount of any hazardous substance is discharged to land through the operation of machinery then the consent holder shall use all practical means to remove all materials contaminated by such hazardous substances from the sites as soon as is reasonably practicable.
28. All water treatment systems shall be operated and maintained efficiently and to the satisfaction of the Manager.
29. The discharge rate shall be controlled so as to prevent scour.
30. The consent holder shall ensure that water and contaminants from de-watering of any area of the MacKays Crossing Improvement works, shall be treated by the sediment control measures approved under condition [15] before being discharged to any surface waterbody.
31. The consent holder shall ensure that temporary erosion and sediment controls, and contractors' site establishment and storage areas, shall be stabilised within 28 days of their completion.
32. Each cut and fill batter shall be stabilised within 2 months where earthworking of that cut or fill surface is completed, or within such further period as is agreed with the Manager, as circumstances warrant.

Contingency Measures

33. The Consent holder shall:
 - (a) Liaise with the Manager about proposed locations of all on-site storage areas for fuels and lubricants. Final locations of said on-site storage areas shall be to the reasonable satisfaction of the Manager;

- (b) Ensure that all on-site storage areas for fuels and lubricants are bunded or contained in such a manner so as to prevent the discharge off-site of spillages of such contaminants;
- (c) Ensure that all machinery and plant is regularly maintained in such a manner so as to minimise the potential for leakage of fuels and lubricants;

Ensure that no equipment or machinery is cleaned, stored or refuelled in Whareroa Stream.

Monitoring Condition

34. Except as provided by condition [35], the consent holder shall submit an EMP to the Manager at least 15 working days prior to the activity commencing. The EMP shall be prepared by a suitably experienced environmental scientist, and shall be completed to the reasonable satisfaction of the Manager prior to the activity commencing.

Exemption Condition

35. Where, in the reasonable opinion of the Manager, the preparation of an ESMP, an ESCP or EMP (as the case may be) would give rise to unnecessary duplication by reason that:

- In the case of an ESMP or EMP, the matters are already addressed by another ESMP or EMP prepared under any resource consent in respect of the Improvement works;
 - In the case of an ESCP, the particular site is already addressed by an ESCP prepared under any resource consent in respect of the Improvement works
- the Manager may, by written notice, exempt the consent holder from the preparation of any ESMP, ESCP or EMP under this consent and the consent holder shall accordingly be exempted from the obligations specified in Conditions [13 to 17, 21, 22, 24, 30 and 34]

Review Condition

36. Except as provided in condition [37], the Wellington Regional Council may review all or any conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time and within six months of the first, third and fifth anniversaries of the date of commencement of this consent for either of the following purposes:

- (i) To deal with any adverse effects on the environment which may arise from the exercise of this consent which it is appropriate to deal with at a later stage;
- (ii) To review the adequacy of any plan prepared under any condition of this consent and/or any monitoring requirements imposed by any condition of this consent so as to incorporate into the consent any modification to any plan or monitoring which may be necessary to deal with any adverse effects on the environment arising from the management or operation of the works.

37. The Wellington Regional Council may on the first, third and fifth anniversaries of the commencement of this consent review the use of TP90 as the standard which the ESCP(s) must be in accordance with where TP90 has been superseded by other guidelines approved by the Wellington Regional Council, by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991.
38. The Wellington Regional Council shall be entitled to recover from the consent holder the costs of the conduct of any review, calculated in accordance with and limited to that council's scale of charges in force and applicable at that time pursuant to section 36 of the RMA.

SCHEDULE 5:

WELLINGTON REGIONAL COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT

DISCHARGE PERMIT WGN 010162 [21043]

A discharge permit to discharge contaminants (including sediment and other local material) and water (which may contain contaminants) to water in MacKays Wetland Reserve, for activities involved in the construction, operation and maintenance and repair, including:

- *Discharges occurring during earthworks, road works, instream works and other construction activities*
- *Discharges of stormwater and other runoff or drainage water*
- *Discharges into and out of temporary construction sediment ponds*
- *Discharges into and out of a permanent sediment pond*
- *Discharges from new culverts, existing culverts and extended culverts*

Duration of Consent

9. In terms of section 123(d) of the Resource Management Act 1991, the period for which this consent is granted is limited to 7 years from the date of commencement of this consent.

Commencement

10. This consent shall commence on the date that the designation for “State Highway Purposes” sought in the Notice of Requirement to Kapiti Coast District Council, dated 19 April 2001 is confirmed.

Works / Design Standard Conditions

11. All fill material disposed of at any of the fills/earth embankments in connection with the proposed works at MacKays Crossing shall be restricted to cleanfill such as clay, soil, rock, and peat and all such fill material shall be placed and compacted so as to minimise erosion and instability.
12. Notwithstanding the requirements of Conditions [13 - 33], the consent holder shall at all times take all practicable steps for minimising erosion and minimising the suspended solids content of any discharge to water.

Erosion and Sediment Control

13. Except as provided by condition [36], prior to the commencement of works the consent holder shall prepare an ESMP and submit that ESMP to the Manager for written approval. This permit shall be exercised at all times in accordance with the ESMP.

14. Except as provided by condition [36], the Consent Holder shall, for the area of the Improvement Works to MacKays Crossing, prepare an ESCP or ESCPs. These plan(s) shall be prepared in accordance with the consent conditions, AEE and the ESMP.

This permit shall be exercised in accordance with the ESCP, provided that this obligation shall cease to apply in respect of any particular site or area of any site once that site or area is stabilised.

15. The ESCP(s) prepared under condition [14] shall be submitted to the Manager, and written approval from the Manager, who shall have regard to the consent conditions, the ESMP and the requirements of TP90 (see [18] below), shall be obtained prior to earthworks commencing.
16. The consent holder shall ensure that all sediment-laden runoff from the site shall be treated by the sediment control measures approved under condition [15].
17. Except in emergencies, no amendments may be made to the ESCP's and implemented controls (approved under condition [15]), unless prior written approval from the Manager is obtained.
18. All erosion and sediment control measures shall be installed in accordance with TP90.
19. All sediment retention ponds shall be constructed to withstand the 1% Annual Exceedance Probability frequency storm event without failing (in part or in whole), and shall incorporate an emergency spillway to accommodate that event.
20. All sediment retention ponds shall incorporate a level spreader across the full width of the inlet end of the pond. The level spreader shall be 100-150 mm above the invert level of the spillway. This need not apply to the permanent stormwater treatment pond constructed in the MacKays Crossing Wetland Reserve once it is converted to a stormwater treatment devise after completion of the State 1 realignment.
21. The permanent stormwater treatment pond to be constructed in the MacKays Crossing Wetland Reserve shall be designed and installed in accordance with section 2.1 "sediment retention pond" of TP90. Upon completion of stage 1 of the MacKays Crossing SH1 realignment, the said pond shall, in consultation with DOC, be either removed, or reconstructed to form a stormwater pond with a hydrocarbon interceptor in general accordance with Figure 6 of Appendix D "Wetland Mitigation" dated April 2001.
22. The consent holder shall ensure that this consent and these attached consent conditions, and ESCP(s) approved under condition [15] are forwarded to all earthworks contractors carrying out works under these consents.
23. Except as provided by condition [36], the consent holder shall submit a certificate signed by experienced staff, to certify that the erosion and sediment controls have been constructed in accordance with any ESCP(s) approved under condition [15] of this consent, following the construction of the controls and prior to the commencement of bulk earthworks. Certified controls shall include sediment retention ponds, and diversion channels/bunds. This requirement shall also apply to sediment retention facilities that are constructed during site development.

Information supplied with the certificate shall include:

- i) Contributing catchment area;
 - ii) Retention volume of structure(s);
 - iii) Shape of structure(s);
 - iv) Position of inlets/outlets;
 - v) Stabilisation of the structure
 - vi) Confirmation of Compliance with condition [14]; and
 - vii) Size of diversion(s) and method of stabilisation
24. A copy of the “as-built” erosion and sediment control plans shall be kept on site and shall be updated as soon as practicable following any changes being made.
25. No sediment retention ponds or perimeter controls as approved and implemented under condition [15] are to be removed unless the removal is approved by the Manager or the relevant site or area is stabilised.
26. During the exercise of this consent, all practicable steps shall be taken to minimise any discharge to the watercourses in the MacKays Wetland in connection with the MacKays Crossing Improvement works that may result in any of the following effects on the receiving waters after reasonable mixing:
- The production of any conspicuous oil or grease films, scums or foams or floatable or suspended material;
 - Any conspicuous change in colour or visual clarity;
 - Any emission of objectionable odour;
 - The rendering of fresh water unsuitable for consumption by humans and farm animals;
 - Any significant adverse effect on aquatic life; and
 - A change of more than 3° Celsius in the natural temperature of the water.
27. No hazardous substances shall be discharged to watercourses.
28. The consent holder shall take all reasonable steps to prevent any hazardous substance being discharged to land through the operation of machinery. If a material amount of any hazardous substance is discharged to land through the operation of machinery then the consent holder shall use all practical means to remove all materials contaminated by such hazardous substances from the sites as soon as is reasonably practicable.
29. All water treatment systems shall be operated and maintained efficiently and to the satisfaction of the Manager.
30. The discharge rate shall be controlled so as to prevent scour.
31. The consent holder shall ensure that water and contaminants from de-watering of any area of the MacKays Crossing Improvement works, shall be treated by the sediment control measures approved under condition [15] before being discharged to any surface waterbody.

32. The consent holder shall ensure that temporary erosion and sediment controls, and contractors' site establishment and storage areas, shall be stabilised within 28 days of their completion.

33. Each cut and fill batter shall be stabilised within 2 months where earthworking of that cut or fill surface is completed, or within such further period as is agreed with the Manager, as circumstances warrant.

Contingency Measures

34. The Consent holder shall:

- (a) Liaise with the Manager about proposed locations of all on-site storage areas for fuels and lubricants. Final locations of said on-site storage areas shall be to the reasonable satisfaction of the Manager;
- (b) Ensure that all on-site storage areas for fuels and lubricants are bunded or contained in such a manner so as to prevent the discharge off-site of spillages of such contaminants;
- (c) Ensure that all machinery and plant is regularly maintained in such a manner so as to minimise the potential for leakage of fuels and lubricants;
- (d) Ensure that no equipment or machinery is cleaned, stored or refuelled in Whareroa Stream.

Monitoring Condition

35. Except as provided by condition [36], the consent holder shall submit an EMP to the Manager at least 15 working days prior to the activity commencing. The EMP shall be prepared by a suitably experienced environmental scientist, as appropriate to meet the requirements of this consent, and shall be completed to the reasonable satisfaction of the Manager prior to the activity commencing.

Exemption Condition

36. Where, in the reasonable opinion of the Manager, the preparation of an ESMP, an ESCP or EMP (as the case may be) would give rise to unnecessary duplication by reason that:

- In the case of an ESMP or EMP, the matters are already addressed by another ESMP or EMP prepared under any resource consent in respect of the Improvement works;
- In the case of an ESCP, the particular site is already addressed by an ESCP prepared under any resource consent in respect of the Improvement works the Manager may, by written notice, exempt the consent holder from the preparation of any ESMP, ESCP or EMP under this consent and the consent holder shall accordingly be exempted from the obligations specified in Conditions [13 to 17, 22, 23, 25, 31 and 35].

Review Condition

37. Except as provided in condition [38], the Wellington Regional Council may review all or any conditions of this consent by giving notice of its intention to do

so pursuant to section 128 of the Resource Management Act 1991, at any time and within six months of the first, third and fifth anniversaries of the date of commencement of this consent for either of the following purposes:

- (i) To deal with any adverse effects on the environment which may arise from the exercise of this consent which it is appropriate to deal with at a later stage;
 - (ii) To review the adequacy of any plan prepared under any condition of this consent and/or any monitoring requirements imposed by any condition of this consent so as to incorporate into the consent any modification to any plan or monitoring which may be necessary to deal with any adverse effects on the environment arising from the management or operation of the works.
38. The Wellington Regional Council may on the first, third and fifth anniversaries of the commencement of this consent review the use of TP90 as the standard which the ESCP(s) must be in accordance with where TP90 has been superseded by other guidelines approved by the Wellington Regional Council, by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991.
39. The Wellington Regional Council shall be entitled to recover from the consent holder the costs of the conduct of any review, calculated in accordance with and limited to that council's scale of charges in force and applicable at that time pursuant to section 36 of the RMA

SCHEDULE 6:

WELLINGTON REGIONAL COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT

DISCHARGE PERMIT WGN 010162 [21708]

A discharge permit to discharge contaminants (including sediment and other local material) to land, including where the contaminants may enter water, for activities involved in the construction, operation and maintenance and repair, including:

- *Discharges occurring during earthworks, roadworks, instream works and other construction activities.*
- *Discharges of stormwater and other run off or drainage water.*
- *Discharges into and out of temporary construction sediment ponds.*
- *Discharges into and out of permanent sediment ponds and other drainage treatment facilities.*
- *Discharges from new culverts, extended culverts and existing culverts.*

Duration of Consent

9. In terms of section 123(d) of the Resource Management Act 1991, the period for which this consent is granted is limited to 7 years from the date of commencement of this consent.

Commencement

10. This consent shall commence on the date that the designation for “State Highway Purposes” sought in the Notice of Requirement to Kapiti Coast District Council, dated 19 April 2001 is confirmed.

Works / Design Standard Conditions

11. All fill material disposed of at any of the fills/earth embankments in connection with the proposed works at MacKays Crossing shall be restricted to cleanfill such as clay, soil, rock, and peat and all such fill material shall be placed and compacted so as to minimise erosion and instability.
12. Notwithstanding the requirements of Conditions [13 - 30], the consent holder shall at all times take all practicable steps for minimising erosion and minimising the suspended solids content of any discharge to water.

Erosion and Sediment Control

13. Except as provided by condition [33], prior to the commencement of works the consent holder shall prepare an ESMP and submit that ESMP to the Manager for written approval. This permit shall be exercised at all times in accordance with the ESMP.

14. Except as provided by condition [33], the Consent Holder shall, for the area of the Improvement Works to MacKays Crossing, prepare an ESCP or ESCPs. These plan(s) shall be prepared in accordance with the consent conditions, AEE and the ESMP.

This permit shall be exercised in accordance with the ESCP, provided that this obligation shall cease to apply in respect of any particular site or area of any site once that site or area is stabilised.

15. The ESCP(s) prepared under condition [14] shall be submitted to the Manager, and written approval from the Manager, who shall have regard to the consent conditions, the ESMP and the requirements of TP90 (see [18] below), shall be obtained prior to earthworks commencing.

16. The consent holder shall ensure that all sediment-laden runoff from the site shall be treated by the sediment control measures approved under condition [15].

17. Except in emergencies, no amendments may be made to the ESCPs) and implemented controls (approved under conditions [15]), unless prior written approval from the Manager is obtained.

18. All erosion and sediment control measures shall be installed in accordance with TP90.

19. All sediment retention ponds shall be constructed to withstand the 1% Annual Exceedance Probability frequency storm event without failing (in part or in whole), and shall incorporate an emergency spillway to accommodate that event.

20. All sediment retention ponds shall incorporate a level spreader across the full width of the inlet end of the pond. The level spreader shall be 100-150 mm above the invert level of the spillway.

21. The consent holder shall ensure that this consent and these attached consent conditions, and ESCP(s) approved under condition [15] are forwarded to all earthworks contractors carrying out works under these consents.

22. Except as provided by condition [33], the consent holder shall submit a certificate signed by experienced staff, to certify that the erosion and sediment controls have been constructed in accordance with any ESCP(s) approved under condition [15] of this consent, following the construction of the controls and prior to the commencement of bulk earthworks. Certified controls shall include sediment retention ponds, and diversion channels/bunds. This requirement shall also apply to sediment retention facilities that are constructed during site development.

Information supplied with the certificate shall include:

- i) Contributing catchment area;
- ii) Retention volume of structure(s);
- iii) Shape of structure(s);
- iv) Position of inlets/outlets;
- v) Stabilisation of the structure
- vi) Confirmation of Compliance with condition [14]; and
- vii) Size of diversion(s) and method of stabilisation

23. A copy of the “as-built” erosion and sediment control plans shall be kept on site and shall be updated as soon as practicable following any changes being made.
24. No sediment retention ponds or perimeter controls as approved and implemented under condition [15] are to be removed unless the removal is approved by the Manager or the relevant site or area is stabilised.
25. During the exercise of this consent, all practicable steps shall be taken to minimise any discharge reaching the Whareroa Stream or the watercourses in the MacKays Wetland in connection with the MacKays Crossing Improvement works that may result in any of the following effects on the receiving waters after reasonable mixing:
 - Production of any conspicuous oil or grease films, scums or foams or floatable or suspended material;
 - Any conspicuous change in colour or visual clarity;
 - Any emission of objectionable odour;
 - Rendering of fresh water unsuitable for consumption by humans and farm animals;
 - Any significant adverse effect on aquatic life; and
 - A change of more than 3° Celsius in the natural temperature of the water.
26. The consent holder shall take all reasonable steps to prevent any hazardous substance being discharged to land through the operation of machinery. If a material amount of any hazardous substance is discharged to land through the operation of machinery then the consent holder shall use all practical means to remove all materials contaminated by such hazardous substances from the sites as soon as is reasonably practicable.
27. All water treatment systems shall be operated and maintained efficiently and to the satisfaction of the Manager.
28. The discharge rate shall be controlled so as to prevent scour.
29. The consent holder shall ensure that temporary erosion and sediment controls, and contractors’ site establishment and storage areas, shall be stabilised within 28 days of their completion.
30. Each cut and fill batter shall be stabilised within 2 months where earthworking of that cut or fill surface is completed, or within such further period as is agreed with the Manager, as circumstances warrant.

Contingency Measures

31. The Consent holder shall:
 - (a) Liaise with the Manager about proposed locations of all on-site storage areas for fuels and lubricants. Final locations of said on-site storage areas shall be to the reasonable satisfaction of the Manager;
 - (b) Ensure that all on-site storage areas for fuels and lubricants are bunded or contained in such a manner so as to prevent the discharge off-site of spillages of such contaminants;

- (c) Ensure that all machinery and plant is regularly maintained in such a manner so as to minimise the potential for leakage of fuels and lubricants;
- (e) Ensure that no equipment or machinery is cleaned, stored or refuelled in Whareroa Stream.

Monitoring Condition

32. Except as provided by condition [33], the consent holder shall submit an EMP to the Manager at least 15 working days prior to the activity commencing. The EMP shall be prepared by a suitably experienced environmental scientist, as appropriate to meet the requirements of this consent, and shall be completed to the reasonable satisfaction of the Manager prior to the activity commencing.

Exemption Condition

33. Where, in the reasonable opinion of the Manager, the preparation of an ESMP, an ESCP or EMP (as the case may be) would give rise to unnecessary duplication by reason that:

- In the case of an ESMP or EMP, the matters are already addressed by another ESMP or EMP prepared under any resource consent in respect of the Improvement works;
 - In the case of an ESCP, the particular site is already addressed by an ESCP prepared under any resource consent in respect of the Improvement works
- the Manager may, by written notice, exempt the consent holder from the preparation of any ESMP, ESCP or EMP under this consent and the consent holder shall accordingly be exempted from the obligations specified in Conditions [13 to 17, 21, 22, 24, and 32]

Review Condition

34. Except as provided in condition [35], the Wellington Regional Council may review all or any conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time and within six months of the first, third and fifth anniversaries of the date of commencement of this consent for either of the following purposes:

- (i) To deal with any adverse effects on the environment which may arise from the exercise of this consent which it is appropriate to deal with at a later stage;
- (ii) To review the adequacy of any plan prepared under any condition of this consent and/or any monitoring requirements imposed by any condition of this consent so as to incorporate into the consent any modification to any plan or monitoring which may be necessary to deal with any adverse effects on the environment arising from the management or operation of the works.

35. The Wellington Regional Council may on the first, third and fifth anniversaries of the commencement of this consent review the use of TP90 as the standard which the ESCP(s) must be in accordance with where TP90 has been superseded by other guidelines approved by the Wellington Regional Council, by giving notice

of its intention to do so pursuant to section 128 of the Resource Management Act 1991.

36. The Wellington Regional Council shall be entitled to recover from the consent holder the costs of the conduct of any review, calculated in accordance with and limited to that council's scale of charges in force and applicable at that time pursuant to section 36 of the RMA

SCHEDULE 7:

WELLINGTON REGIONAL COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT

LAND USE CONSENT WGN 010162 [21042]

A land use consent to undertake activities in, on, under or over the bed of Whareroa Stream, and the adjoining Department of Conservation Wetland Reserve, and related areas, for construction, operation, maintenance and repair activities including:

- *Works associated with the placing of new culverts, altering and extending existing culverts including changing the size of the culverts, in the Whareroa stream, and the DOC Wetland Reserve.*
- *Excavation of an area of the existing wetland to construct a permanent structure to be used as a sediment control pond and petro-chemical intercept and associated drainage works.*
- *Construction of temporary structures to aid sediment control during construction including the provision of sediment control ponds.*
- *Construction of permanent structures in and over the Whareroa Stream bed including a new farm access road, and to infill part of the stream bed to form batters to support new roads.*
- *Works associated with the forming of the embankment and construction of the railway overbridge, including the construction of retaining walls both temporary and permanent, culverts, and including the depositing of material on the land.*

Duration of Consent

9. In terms of section 123(c) of the Resource Management Act 1991, the period for which this consent is granted is limited to 35 years from the date of commencement of this consent.

Commencement

10. This consent shall commence on the date that the designation for "State Highway Purposes" sought in the Notice of Requirement to Kapiti Coast District Council, dated 19 April 2001 is confirmed.

Works / Design Standard Conditions

11. All material placed in the beds of watercourses shall be inert and suitable for the site.
12. All works affecting watercourses, including tidy up on completion of the works, shall be to the reasonable satisfaction of the Manager. All material surplus to the works shall be removed from the bed and banks of the watercourses.

13. The works shall remain the responsibility of the consent holder who shall maintain the works in an efficient operating condition at all times and to the reasonable satisfaction of the Manager. Maintenance work shall not include that which changes the scope and nature of the works.
14. All construction works in the stream bed shall be completed in the minimum time practicable. All pipes should be placed in accordance with best engineering practice and the manufacturer's specifications.
15. No sediment retention ponds or silt fences shall be constructed in the active channel of Whareroa Stream.
16. Notwithstanding the requirements of Conditions [19-23] the consent holder shall at all times take all practicable steps to minimise erosion and minimise the suspended solids content of any discharge to water due to the works.
17. The permanent stormwater treatment pond to be constructed in the MacKays Crossing Wetland Reserve shall be designed and installed in accordance with section 2.1 "sediment retention pond" of TP90. Upon completion of stage 1 of the MacKays Crossing SH1 realignment, the said pond shall, in consultation with DOC, be either removed, or reconstructed to form a stormwater pond with a hydrocarbon interceptor in general accordance with Figure 6 of Appendix D "Wetland Mitigation" dated April 2001.

Contingency Measures

18. The Consent holder shall:

- (a) Liaise with the Manager about proposed locations of all on-site storage areas for fuels and lubricants. Final locations of said on-site storage areas shall be to the reasonable satisfaction of the Manager, Consents Management, Wellington Regional Council;
- (b) Ensure that all on-site storage areas for fuels and lubricants are bunded or contained in such a manner so as to prevent the discharge off-site of spillages of such contaminants;
- (c) Ensure that all machinery and plant is regularly maintained in such a manner so as to minimise the potential for leakage of fuels and lubricants;
- (d) Ensure that no equipment or machinery is cleaned, stored or refuelled in Whareroa Stream or MacKays Wetland.

Erosion and Sediment Control

19. The consent holder shall take all practicable steps to prevent run-off from raw cuts and fills in the streambed. Such steps shall be to the satisfaction of the Manager.
20. The consent holder shall take all practicable steps to minimise sediment loading and increased turbidity of the watercourses, due to the construction, implementation and operation of the works. Such steps shall be to the satisfaction of the Manager and shall include diversion of the watercourse wherever practicable.

21. If MetService Forecast Services are forecasting rain at the site overnight, the consent holder shall ensure that all bare areas of, or associated with, the bed of the Whareroa Stream are protected against erosion at the end of each construction day. In any event the consent holder shall ensure that all such bare areas are protected against erosion at the end of each working week.
22. No uncompacted material shall be stockpiled near the active stream channel either during or after earthworks.
23. Any erosion of the stream bank or bed that is attributable to any of the works shall be repaired by the consent holder.

Fish Passage

24. The consent holder shall ensure that any existing culverts which will be retained following completion of the works which currently allow fish passage for climbing species shall continue to provide such passage following completion of the works to the reasonable satisfaction of the Manager. Any new culverts in the Whareroa Stream shall be designed in accordance with the publication "Fish Passage at Culverts" by NIWA.
25. The consent holder shall take all practicable measures to remove any fish from any sections of stream to be de-watered and to relocate any such fish to appropriate relocation sites.

Monitoring Condition

26. Except as provided by condition [27], the consent holder shall submit an EMP to the Manager at least 15 working days prior to the activity commencing. The EMP shall be prepared by a suitably experienced environmental scientist, as appropriate to meet the requirements of this consent, and shall be completed to the reasonable satisfaction of the Manager prior to the activity commencing.

Exemption Condition

27. Where, in the reasonable opinion of the Manager, the preparation of an EMP would give rise to unnecessary duplication by reason that the matters are already addressed by another EMP prepared under any resource consent in respect of the Improvement works, the Manager may, by written notice, exempt the consent holder from the preparation of any EMP under this consent and the consent holder shall accordingly be exempted from the obligations specified in condition [26].

SCHEDEULE 8:

WELLINGTON REGIONAL COUNCIL
MACKAYS CROSSING OVERBRIDGE PROJECT

LAND USE CONSENT WGN 010162 [21044]

A Land Use consent to undertake earthworks to disturb and remove soil including excavation of a cutting, building batters and placing roading structures on top of the batters and all associated roading activities as indicated on the submitted drawings.

Commencement

9. This consent shall commence on the date that the designation for “State Highway Purposes” sought in the Notice of Requirement to Kapiti Coast District Council, dated 19 April 2001 is confirmed.

Works / Design Standard Conditions

10. Notwithstanding the requirements of conditions [11-24], the consent holder shall at all times take all practicable steps for minimising erosion and/or minimising the suspended solids content of the discharge to water.

Erosion and Sediment Control

11. Except as provided by condition [31] prior to the commencement of works the consent holder shall prepare an ESMP and submit that ESMP to the Manager for written approval. This permit shall be exercised in accordance with the aforesaid ESMP.
12. Except as provided by condition [31] the Consent holder shall, for the area of the Improvement works to MacKays Crossing, prepare an ESCP or ESCPs. These plan(s) shall be prepared in accordance with the consent conditions, AEE and the ESMP.

This permit shall be exercised in accordance with the ESCP, provided that this obligation shall cease to apply in respect of any particular site or area of any site once that site or area is stabilised.

13. The ESCP(s) prepared under condition [12] shall be submitted to the Manager and written approval from the Manager, who shall have regard to the consent conditions, the ESMP and the requirements of TP90 (see condition [16] below), shall be obtained prior to earthworks commencing.
14. The consent holder shall ensure that all sediment-laden runoff from the site shall be treated by the sediment control measures approved under condition [13].
15. Except in emergencies, no amendments may be made to the ESCP’s and implemented controls (approved under conditions [13]), unless prior written approval from the Manager is obtained.

16. All erosion and sediment control measures shall be installed in accordance with TP90.
17. All sediment retention ponds shall be constructed to withstand the 1% Annual Exceedance Probability frequency storm event without failing (in part or in whole), and shall incorporate an emergency spillway to accommodate that event.
18. The consent holder shall ensure that this consent and these attached consent conditions, and ESCP(s) approved under condition [13] are forwarded to all earthworks contractors carrying out works under these consents.
19. Except as provided by condition [31], the consent holder shall submit a certificate signed by the experienced staff, to certify that the erosion and sediment controls have been constructed in accordance with any relevant ESCP approved under condition [13] of this consent, following the construction of the controls and prior to the commencement of bulk earthworks. Certified controls shall include sediment retention ponds, and diversion channels/bunds. This requirement shall also apply to sediment retention facilities that are constructed during site development.

Information supplied shall include:

- i) Contributing catchment area;
 - ii) Retention volume of structure(s);
 - iii) Shape of structure(s);
 - iv) Position of inlets/outlets;
 - v) Stabilisation of the structure;
 - vi) Confirmation of Compliance with condition [12]; and
 - vii) Size of diversion(s) and method of stabilisation
20. A copy of the “as-built” erosion and sediment control plans shall be kept on site and shall be updated as soon as practicable following any changes being made.
 21. No sediment retention ponds or perimeter controls as approved and implemented under condition [13] are to be removed unless approved by the Manager or the site or area is stabilised.
 22. The consent holder shall ensure that temporary erosion and sediment controls, and contractors’ site establishment and storage areas, shall be stabilised within 28 days of their completion.
 23. Each cut and fill batter shall be stabilised no later than 2 months after earthworking of that cut or fill surface is completed, or within such further period as is agreed with the Manager, as circumstances warrant.
 24. All water treatment systems shall be operated and maintained efficiently and to the reasonable satisfaction of the Manager.

Batter stability

25. All fill material disposed of at any of the fills in connection with the proposed MacKays Crossing improvements shall be restricted to cleanfill such as clay, soil, rock and peat and all such fill material shall be placed and compacted so as to minimise erosion and instability.

26. The consent holder shall construct stable cut batters, and shall implement sound engineering solutions where poor ground conditions are exposed in those batters.
27. The works shall remain the responsibility of the consent holder and shall be maintained to the reasonable satisfaction of the Manager. Maintenance shall include all practical steps to prevent failure of cut and fill batters.
28. Any failure of cut and fill batters that is attributable to the works shall be contained, remedied and mitigated by the consent holder to the reasonable satisfaction of the Manager.

Contingency Measures

29. The Consent holder shall:

- (a) Liaise with the Manager about proposed locations of all on-site storage areas for fuels and lubricants. Final locations of said on-site storage areas shall be to the reasonable satisfaction of the Manager;
- (b) Ensure that all on-site storage areas for fuels and lubricants are bunded or contained in such a manner so as to prevent the discharge off-site of spillages of such contaminants;
- (c) Ensure that all machinery and plant is regularly maintained in such a manner so as to minimise the potential for leakage of fuels and lubricants;
- (d) Ensure that no equipment or machinery is cleaned, stored or refuelled in Wharereroa Stream

Monitoring Condition

30. Except as provided by condition [31], the consent holder shall submit an EMP to the Manager at least 15 working days prior to the activity commencing. The EMP shall be prepared by a suitably experienced environmental scientist, as appropriate to meet the requirements of this consent, and shall be completed to the reasonable satisfaction of the Manager prior to the activity commencing.

Exemption Condition

31. Where, in the reasonable opinion of the Manager, the preparation of an ESMP, an ESCP or EMP (as the case may be) would give rise to unnecessary duplication by reason that:

- In the case of an ESMP or EMP, the matters are already addressed by another ESMP or EMP prepared under any resource consent in respect of the Improvement works;
 - In the case of an ESCP, the particular site is already addressed by an ESCP prepared under any resource consent in respect of the Improvement works
- the Manager may, by written notice, exempt the consent holder from the preparation of any ESMP, ESCP or EMP under this consent and the consent holder shall accordingly be exempted from the obligations specified in Conditions [11 to 15, 18, 19, 21 and 30].

Review Condition

32. Except as provided in condition [29], the Wellington Regional Council may review all or any conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time and within six months of the within six months of the first, third, fifth, seventh, ninth, eleventh and thirteenth anniversaries of the date of commencement of this consent for either of the following purposes:
 - (i) To deal with any adverse effects on the environment which may arise from the exercise of this consent which it is appropriate to deal with at a later stage;
 - (ii) To review the adequacy of any plan prepared under any condition of this consent and/or any monitoring requirements imposed by any condition of this consent so as to incorporate into the consent any modification to any plan or monitoring which may be necessary to deal with any adverse effects on the environment arising from the management or operation of the works.
33. The Wellington Regional Council may on the first, third, fifth, seventh, ninth, eleventh and thirteenth anniversaries of the commencement of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991 review the use of TP90 as the standard which the ESCP(s) must be in accordance with where TP90 has been superseded by other guidelines approved by the Wellington Regional Council.
34. The Wellington Regional Council shall be entitled to recover from the consent holder the costs of the conduct of any review, calculated in accordance with and limited to that councils scale of charges in-force and applicable at that time pursuant to section 36 of the RMA.